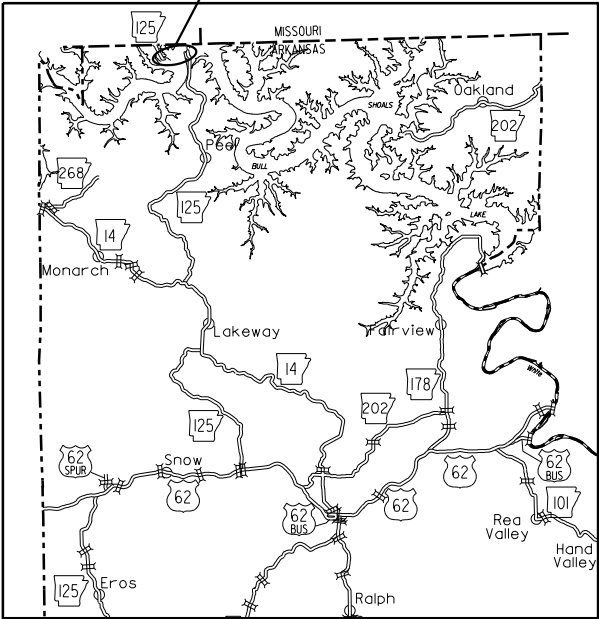


DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090654	I	15
PEEL FERRY DOCK IMPROVEMENTS (S)						

PROJECT
LOCATION



VICINITY MAP



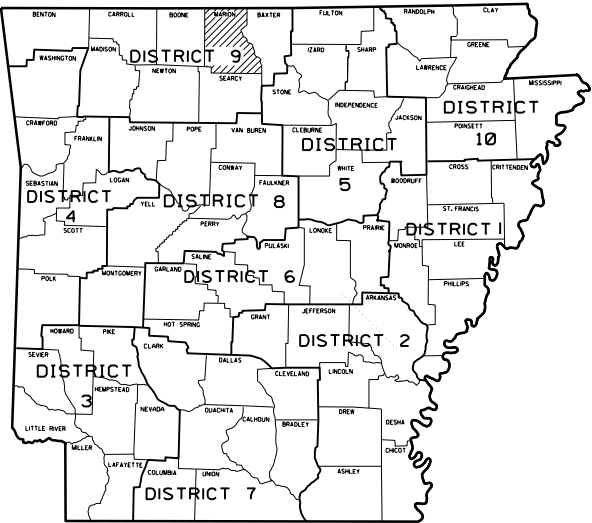
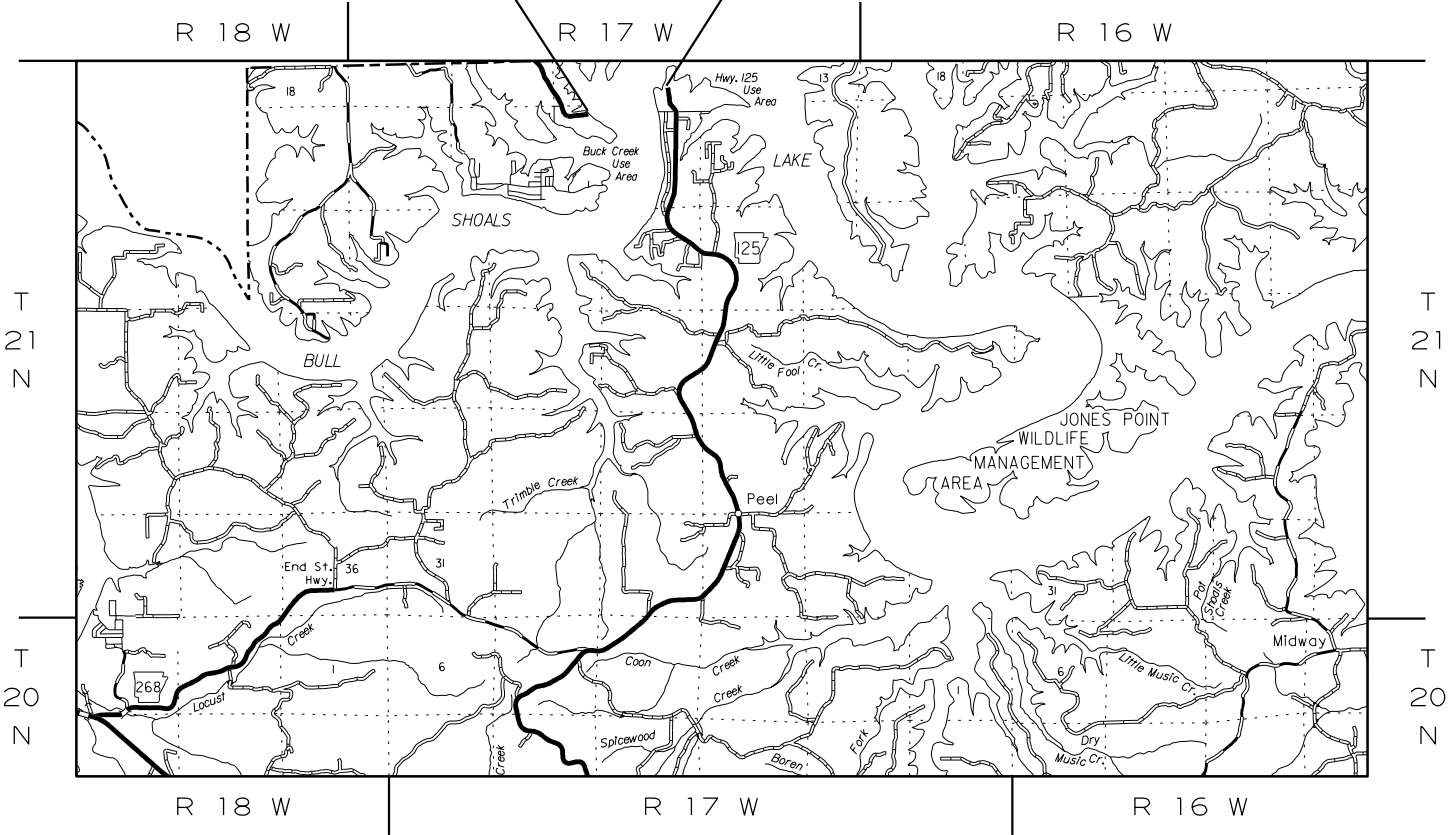
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

PEEL FERRY DOCK IMPROVEMENTS (S)
MARION COUNTY
ROUTE 125 SECTION 2
JOB 090654

NOT TO SCALE

LOG MILE 12.373
END JOB 090654

LOG MILE 12.367
BEGIN JOB 090654



ARKANSAS HIGHWAY DISTRICT 9

PROJECT COORDINATES

	BEGIN	MID-POINT	END
LATITUDE	N 36°29'40"	N 36°29'36"	N 36°29'25"
LONGITUDE	W 92°46'48"	W 92°47'16"	W 92°47'37"



DIGITALLY SIGNED 11/15/2022

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JHRuddell
WORKSPACE: ARDOT Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	2	15
				INDEX OF SHEETS AND GOVERNING SPECS.				

2



DIGITALLY SIGNED 11/15/2022

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.
1	TITLE SHEET		
2	INDEX OF SHEETS AND GOVERNING SPECIFICATIONS		
3	SUMMARY OF QUANTITIES AND REVISIONS		
4	SCHEDULE OF BRIDGE QUANTITIES	07596 & 07597	65721
5	LOCATION SKETCH	07596 & 07597	65722
6	PROJECT GENERAL NOTES	07596 & 07597	65723
7	PEEL FERRY DOCK DETAILS (SHEET 1 OF 9)	07596 & 07597	65724
8	PEEL FERRY DOCK DETAILS (SHEET 2 OF 9)	07596 & 07597	65725
9	PEEL FERRY DOCK DETAILS (SHEET 3 OF 9)	07596 & 07597	65726
10	PEEL FERRY DOCK DETAILS (SHEET 4 OF 9)	07596 & 07597	65727
11	PEEL FERRY DOCK DETAILS (SHEET 5 OF 9)	07596 & 07597	65728
12	PEEL FERRY DOCK DETAILS (SHEET 6 OF 9)	07596 & 07597	65729
13	PEEL FERRY DOCK DETAILS (SHEET 7 OF 9)	07596 & 07597	65730
14	PEEL FERRY DOCK DETAILS (SHEET 8 OF 9)	07596 & 07597	65731
15	PEEL FERRY DOCK DETAILS (SHEET 9 OF 9)	07596 & 07597	65732

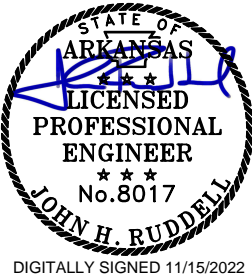
GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
105-4	MAINTENENACE DURING CONSTRUCTION
107-2	RESTRAINING CONDITIONS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
306-1	QUALITY CONTROL AND ACCEPTANCE
800-1	STRUCTURES
802-4	CEMENT
807-2	STEEL STRUCTURES
JOB 090654	BAR GRATING
JOB 090654	BARGE ASSEMBLY
JOB 090654	BARGE LIGHTING
JOB 090654	BARGE WINCH SYSTEM
JOB 090654	BIDDING REQUIREMENTS AND CONDITIONS
JOB 090654	DIRECT TENSION INDICATORS FOR HIGH STRENGTH BOLT ASSEMBLIES
JOB 090654	ESTABLISHING CONTRACT TIME - WORKING DAY CONTRACT
JOB 090654	FENDERING
JOB 090654	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 090654	MANDATORY ELECTRONIC CONTRACT
JOB 090654	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 090654	REMOVAL OF EXISTING BRIDGE STRUCTURE
JOB 090654	STOP GATE BARRIER
JOB 090654	STORAGE BOX

J:\HRuddell - 11/15/2022 3:22:48 PM
WORKSPACE: ARDOT Bridge
\\gserver\inc\local\gdata\Projects\2021\T10104 - ARDOT 090654 PeelFerry Dock Imp\Drawings\090654.0TY_SUM.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	090654	3 15
2 SUMMARY OF QUANTITIES AND REVISIONS								



SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
601	MOBILIZATION	1.00	LUMP SUM
STRUCTURES OVER 20' SPAN			
SP & 205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	1.00	LUMP SUM
SP & 205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 2)	1.00	LUMP SUM
636	BRIDGE CONSTRUCTION CONTROL	1.00	LUMP SUM
SS & 806	METAL BRIDGE RAILING (TYPE H3)	156	LIN. FT.
SS & 806	METAL BRIDGE RAILING (TYPE H4)	94	LIN. FT.
SP, SS, & 807	STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)	68580	POUND
SP	BARGE LIGHTING ASSEMBLY	4	EACH
SP	BARGE WINCH	4	EACH
SP	BAR GRATING	1500	SQ. FT.
SP	CYLINDRICAL FENDER	114	LIN. FT.
SP	D-SHAPED FENDER	80	LIN. FT.
SP	FOUR-ROLLER FAIRLEAD	4	EACH
SP	SECTIONAL BARGE	8	EACH
SP	STOP GATE BARRIER	2	EACH
SP	STORAGE BOX	2	EACH

REVISIONS

DATE	REVISION	SHEET NUMBER

11/15/2022 11:40:12 AM
WORKSPACE: ARDOT Bldg (2019)
L:\2021\21T01014 - ARDOT 090654 Peel Ferry Dock Imp\Drawings\090654_QT.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	4	15
				07596 & 07597		QUANTITIES	65721	

SCHEDULE OF BRIDGE QUANTITIES - JOB. NO. 090654

BRIDGE NO.	UNIT OF STRUCTURE	ITEM NO.	SP & 205	SS & 806	SS & 806	SP, SS & 807	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654	SP JOB 090654
		ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	METAL BRIDGE RAILING (TYPE H3)	METAL BRIDGE RAILING (TYPE H4)	STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)	BARGE LIGHTING ASSEMBLY	BARGE WINCH	BAR GRATING	CYLINDRICAL FENDER	D-SHAPED FENDER	FOUR-ROLLER FAIRLEAD	SECTIONAL BARGE	STOP GATE BARRIER	STORAGE BOX
		UNIT	LUMP SUM	LIN. FT.	LIN. FT.	LB.	EACH	EACH	SQ. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH
07596	BARGE ASSEMBLY			78		2,518	2	2		57	40	2	4	1	1
	RAMP SECTION 1				47	16,374			536						
	RAMP SECTION 2					6,713			214						
	RAMP SECTION 3					8,685									
	SITE NO. 1 (EXISTING BRIDGE NO. X1652)		1												
	TOTALS FOR BRIDGE NO. 07596			78	47	34,290	2	2	750	57	40	2	4	1	1
07597	BARGE ASSEMBLY			78		2,518	2	2		57	40	2	4	1	1
	RAMP SECTION 1				47	16,374			536						
	RAMP SECTION 2					6,713			214						
	RAMP SECTION 3					8,685									
	SITE NO. 2 (EXISTING BRIDGE NO. X1653)		1												
	TOTALS FOR BRIDGE NO. 07597			78	47	34,290	2	2	750	57	40	2	4	1	1
TOTALS FOR JOB NO. 090654				156	94	68,580	4	③ 4	1,500	④ 114	80	4	8	2	2

- ① See "REMOVAL AND SALVAGE" note on Dwg. No. 65723 and SP "REMOVAL OF EXISTING BRIDGE STRUCTURE" for more information.
- ② All structural steel shall be galvanized after fabrication is complete. The cost of galvanizing the structural steel shall not be paid for separately but shall be included in the cost bid per pound for the item "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".
- ③ Two (2) left hand models and two (2) right hand models are required. The cost of the 275' of wire rope shall be included in the price bid for each barge winch. See SP "BARGE WINCH SYSTEM" for additional information.
- ④ The cost of the cylindrical fendering shall include 160 feet of galvanized Grade 30 chain, 48 galvanized Quick Links and 48 galvanized shackles. See SP "FENDERING" for more information regarding chain and hardware requirements.

NOTE:
For additional information regarding special provision items, refer to the "PROJECT GENERAL NOTES" on Dwg. No. 65723 and the special provision of each respective item.

REFERENCE TABLE

BRIDGE NO.	EXISTING DRAWING NUMBERS
X1652 - X1653	SDB-1



SCHEDULE OF BRIDGE QUANTITIES
PEEL FERRY DOCK IMPROVEMENTS (S)
MARION COUNTY
ROUTE 125 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JME DATE: AUG. 2022 FILENAME: b090654_QT
CHECKED BY: JHR DATE: AUG. 2022 SCALE: As Shown
DESIGNED BY: JME DATE: AUG. 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65721

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	090654	5
								15

07596 & 07597 LOCATION SKETCH 65722



LOCATION SKETCH

NOTES:
For "PROJECT GENERAL NOTES", see Dwg. No. 65723.

Alignment shown is a paper-located centerline and intended to provide a means of locating ferry dock features and a general indication of project extents only.



LOCATION SKETCH
PEEL FERRY OVER LITTLE BUCK CREEK
PEEL FERRY DOCK IMPROVEMENTS (S)
MARION COUNTY
ROUTE 125 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b090654_L1
CHECKED BY: JME DATE: AUG. 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: AUG. 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65722

PROJECT GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 Edition) with applicable Supplemental Specifications and Special Provisions. Unless otherwise noted in the plans, Section and Subsection numbers refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications (2017, 8th Edition)

LIVE LOADING: Ramp - H20 (See "H-TRUCK LOADING DIAGRAM")
Barge Assembly - H15 (Based on Load Rating) (See "H-TRUCK LOADING DIAGRAM")
Barge Deck - Modified H20 (See "DECK PLATE DESIGN LOADING" on Dwg. No. 65729

MATERIALS AND STRENGTHS:
Structural Steel (ASTM A709, Gr. 50) Fy = 50,000 psi
Structural Steel (ASTM A709, Gr. 36) Fy = 36,000 psi
Structural Steel (ASTM A668, Grade F) Fy = 50,000 psi

BARGE ASSEMBLY: The barge assembly shall be comprised of sectional barges manufactured by Poseidon Barge, Ltd. or an approved equal. Details shown in plans are based Poseidon Barge Model P2-5B-40 modified for depth as shown in the plans. For more information, refer to SP "BARGE ASSEMBLY". Each sectional barge shall be designed to accommodate the "DECK PLATE DESIGN LOADING" shown on Dwg.No. 65729. In addition, the interior barge sections shall be designed to accommodate the connection plate loadings from the ramp connections. See "TABLE OF REACTIONS" on Dwg. No. 65729. The barge manufacturer shall submit design calculations verifying the adequacy of the barge section to withstand these loadings.

All barge sections shall be provided with connection plates to accommodate connection of the D-Shaped fenders on the lakeside end of the barge assembly. The exterior barge sections shall be provided with handrail pipe sleeve connections to receive sections of the Metal Bridge Railing (Type H3) and deck cleats required for securing the ferry to the barge assembly as shown in the plans. In addition, the exterior barges shall be provided with anchor plates to accommodate connection of the light pole base plates, barge winches and fairleads. Anchor plate dimensions and details shall be in accordance with the details shown in the plans unless otherwise approved by the Engineer. The cost of the fender connection plates, ramp connection plates, deck cleats, handrail pipe sleeve connections and all anchor plates required shall not be paid for separately but shall be included in the unit price per each of the item "SECTIONAL BARGE".

STOP GATE BARRIER: The Stop Gate Barrier required at the end of each Ramp Section 1 shall be a manual arm lift barrier gate with counterweight manufactured by Secure Lane, LLC or an approved equal. The details shown in the plans are based on Model SL-LB with steel cable truss system. The base plate assembly for the barrier gate shall be modified from the standard size indicated for use with Model SL-LB to accommodate the connection to the ramp section. Details of the required base plate assembly are shown in the plans. In addition, the Receiving Post assembly shall be modified from the standard configuration used with Model SL-LB to approximately match the Steel Pedestal used on the pivoting end of the barrier gate. Base plates shall be fabricated from ASTM A709, Grade 36 steel. Anchor bolts shall be ASTM F3125, Grade A325, Type 1. Standard washers shall be provided under the head and nuts of the anchor bolts and shall meet the requirements of ASTM F436. Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H. Anchor plates placed on the underside of the bar grating shall be ASTM A709, Grade 36 and shall be galvanized in accordance with AASHTO M 111. The cost of the steel pedestals, receiving posts, base plates, anchor bolts and anchor plates required to mount the barrier gate to the ramp shall not be paid for separately but shall be included in the unit price per each of the item "STOP GATE BARRIER".

STRUCTURAL STEEL (RAMP SECTIONS): Drawings show general features of design only. Shop drawings shall be made in accordance with the specifications, submitted and approved secured before fabrication begins. Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steel of equal or greater strength will be accepted only when shown on the approved shop drawings. Payment will be made for any adjustments due to substitutions.

Unless noted otherwise, all structural steel in ramp sections shall be ASTM A709, Grade 50 and shall be paid for as "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". Structural steel for pins used to connect the ramp section to the barge assembly shall be ASTM A668, Class F and shall be paid for as "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". Holes for pins shall be fabricated with Subsection 807.51 and surfaces of pins and pin holes shall be finished in accordance with Subsection 807.31.

All structural steel shall be galvanized in accordance with AASHTO M 111 after fabrication is complete. Careful attention shall be given to the pin connections used between the ramp and barge. Pin holes shall be adequately protected / masked as required to maintain the finished surfaces of the pin hole. The cost of galvanizing the structural steel shall not be paid for separately but shall be included in the unit price per pound of the item " STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether permanent or temporary, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to Subsection 807.26. Groove welds shall be Quality Control (Q.C.) tested by nondestructive testing, as required in Subsection 807.23(b). Fillet welds at flange to web plate connections shall be Q.C. tested by the magnetic particle method. All Q.C. testing shall be considered subsidiary to the item "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". All rolled beams and plate girders are considered main load-carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Subsection 807.05. This work and material will not be paid for directly but shall be considered subsidiary to the item "STRUCTURAL STEEL IN BEAMS SPANS (A709, GR. 50)".

Unless noted otherwise, diaphragms and lateral bracing shall be installed as rolled beams and plate girders are erected. All bolts in diaphragms shall be installed and tightened in accordance with Subsection 807.70. All webs and flanges for main members shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses. Unless noted otherwise, field connections shall be bolted with 7/8"ø high-strength bolts using 1 1/4"ø open holes. Holes for 7/8"ø high-strength bolts may be 1"ø If a washer is supplied for use under both the nut and head of the bolt. The use of oversized holes will not be allowed on main members unless otherwise noted. Bolts shall be placed with heads on the outside face of the exterior beam or girder webs and on the bottom of the beam or girder flanges. All rolled beams and plate girders shall be blocked in their true position with webs horizontal. The camber, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records. All rolled beam and plate girder dimensions are based on a temperature of 60 degrees F. Mill camber shall be evaluated and all rolled beams shall be positioned with natural mill camber oriented upwards. The difference in natural camber within Ramp Section 1 in adjacent beams shall not be more than 1/8".

BAR GRATING: The Bar Grating used where indicated on the sections of the ramp shall be 30-W-4 Heavy Duty Grating and shall be galvanized in accordance with AASHTO M 111 after fabrication. The structural steel used in the fabrication of the bar grating shall be ASTM A709, Grade 36. The bars used for the bar grating shall be 4 1/2"x 3/8" with a serrated top. 3/8" banding shall be welded along each end of the panels. Each individual panel shall be fabricated to a width of approximately 2'-8 1/4". The length of the bar grating panels shall meet the dimensions shown in the plans. The overall length of the ramp sections where bar grating is to be installed has been established to accommodate the total number of panels required including a minimum 1/4" gap between individual panels. The width of the individual bar grating panel shall not be modified without approval of the Engineer. The bar grating shall be connected to the ramp structure using welded lug connections as shown in the plans. The welded lugs shall be fabricated with the bar grating. The cost of the welded lugs shall be included in the unit price per square foot for the item "BAR GRATING".

Anchor bolts used to connect the bar grating to the supporting ramp structure shall be 3/4"ø socket head cap screws with hexagonal drive. The cap screws shall be F3125, Grade A325, Type 1. Standard washers shall be provided under the nuts of the anchor bolts and shall meet the requirements of ASTM F436. Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H. Plate washers used beneath the head of the cap screws shall be ASTM A709, Grade 36 and shall be galvanized in accordance with AASHTO M 232. The cost of the fasteners used to connect the bar grating to the ramp sections shall be included in the item "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".

STEEL PATTERNED PLATE: The steel patterned plate used on sections of the ramp shall be fabricated from ASTM A709, Grade 50 steel. The steel patterned plate shall be connected to the supporting structure as shown on the plans. Bolts with countersunk heads used to connect the steel patterned plate to the ramp structure shall be ASTM F3125, Grade A325, Type 1. Where required, the flanges of the supporting ramp structure shall be drilled and tapped to receive the countersunk bolts.

BARGE WINCH AND FAIRLEAD: Barge winches and four-roller fairleads shall be provided as shown on the plans. Barge winches shall be Manual Low-Profile Barge Winches, Model 20HL-10-12 and 20HR-10-12 (left-hand and right-hand models, respectively) as manufactured by Wintech International, LLC or an approved equal. The barge winch shall have a holding capacity of 20 tons. The barge winches shall be provided with 275 feet of 3/4" IWRC wire rope with a breaking strength of 29.4 tons. The cost of the 3/4" wire rope shall not be paid for separately but shall be included in the unit price per each of the item "BARGE WINCH". The four-roller fairlead shall be Model F4-40 as manufactured by Wintech International, LLC or an approved equal. The barge winches and fairleads shall be field welded to the anchor plate assemblies provided with the sectional barges. All paint on the surfaces of the anchor plates and the winches/fairleads shall be removed prior to field welding and touched up with an approved paint system after welding is complete. For more information, see SP "BARGE WINCH SYSTEM".

FENDERING: The barge assembly shall be fitted with fendering as shown on the plans. All fenders shall be fabricated using heavy-duty EPDM (Ethylene Propylene-Diene-Monomer) Rubber and shall be black in color. For more information, see SP "FENDERING". The fender along the lakeside ends of the barge assembly shall be D-Shaped / O-Bore fenders, Model DB-910, as manufactured by Duramax Marine or an approved equal. The D-Shaped fender shall be connected to the barge as shown on the plans. The fenders shall be provided with pre-drilled holes to accommodate the bolted connections to the barge. The cost of the bolts attaching the fenders to the barge shall be included in the cost per linear foot of the item "D-SHAPED FENDER". The fenders along the sides of the barge assembly shall be 5" diameter cylindrical fenders, Model DB-205, as manufactured by Duramax Marine or an approved equal. The fenders shall be connected to the barge assembly using a 3/8" Grade 30 galvanized chain. A minimum of two galvanized quick links and two galvanized screw pin anchor shackles per each post connection shall be provided to facilitate connection of the cylindrical fenders. The cost of the galvanized chains and hardware shall not be paid for separately but shall be included in the cost per linear foot of the item "CYLINDRICAL FENDER".

BARGE LIGHTING: The barge assembly shall be lighted as shown on the plans. The light poles and solar-powered LED fixtures shall be manufactured by First Light Technologies or an approved equal. The solar-powered LED fixture shall be Model SCL2 and mounted 15' above the deck of the barge. The light pole shall be a 4" square pole with a welded base plate to allow connection of the light pole to the anchor plates mounted on the deck of the barge. The bolt circle for the base plate connection is assumed to be 8.5". The Contractor shall be responsible for coordinating the base plate connection configuration to ensure compatibility. For more information, see SP "BARGE LIGHTING".

METAL BRIDGE RAILING: The sections of handrail along the barge assembly and ramp sections shall be welded pipe handrail. All pipe used in the fabrication of the metal bridge railing shall be ASTM A53, Grade B. Schedule 80 pipe shall be used for the posts and curved sections of the railing. Schedule 40 pipe shall be used for the horizontal rails. All metal bridge railing shall be fabricated in accordance with Section 806. All components of the metal bridge railing shall be galvanized per Subsection 806.02(c). Payment for the handrailing on the barge assembly shall be made under the item "METAL BRIDGE RAILING (TYPE H3)". These sections shall be connected to the barge assembly by means of the sleeve connections welded to the barge deck. The sleeve connections shall be provided as described above under the item "BARGE ASSEMBLY". Payment for the handrailing on the ramp sections shall be made under the item "METAL BRIDGE RAILING (TYPE H4)". These sections shall be connected to the ramp sections by means of base plates, anchor bolts and anchor plates. The anchor plates shall match the dimensions of the base plates. Base plates and anchor plates shall be fabricated from ASTM A709, Grade 36 steel. Anchor bolts shall be ASTM F3125, Grade A325, Type 1. Standard washers shall be provided under the head and nuts of the anchor bolts and shall meet the requirements of ASTM F436. Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H. The cost of the base plates, anchor plates and fasteners shall be included in the linear foot cost of the item "METAL BRIDGE RAILING (TYPE H4)".

STORAGE BOX: Storage boxes shall be provided at the locations shown in the plans. The cost of the steel frame used to support the storage boxes shall be included in the price bid per each of the item "STORAGE BOX". For more information, see SP "STORAGE BOX".

SHOP DRAWINGS: Shop drawings for all components of the barge assembly, stop gate barrier, metal bridge railing, structural steel, bar grating, fendering, barge winches and fairleads, and barge lighting shall be prepared and submitted for review prior to fabrication.

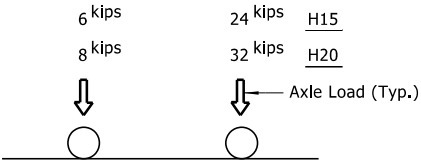
EXISTING DOCKS: The existing docks each consist of 3 - 10'x40'x4' steel barges with approximately 36' of ramp structure. Existing barges are welded steel sections that are bolted together to form the dock section. Bolted connections can be accessed through the hatches on the existing barge deck. The existing ramp sections are W-beams with a timber deck. Plans of the existing structure, if available, may be obtained upon request to the Construction Contract Development Section of the Program Management Division.

REMOVAL AND SALVAGE: Existing docks, including the barges and ramps, shall be removed in accordance with SP "REMOVAL OF EXISTING BRIDGE STRUCTURE". All material from the existing docks, except the existing steel cables, shall become property of the Contractor. The existing steel cables shall be retained by the Department. The Contractor shall coordinate with the Engineer for delivery of the retained cabling to the Department.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	6	15
07596 & 07597				GENERAL NOTES			65723	

DETAIL DRAWINGS:
Location Sketch
Peel Ferry Dock Details

DRAWING NO(S):
65722
65724 - 65732

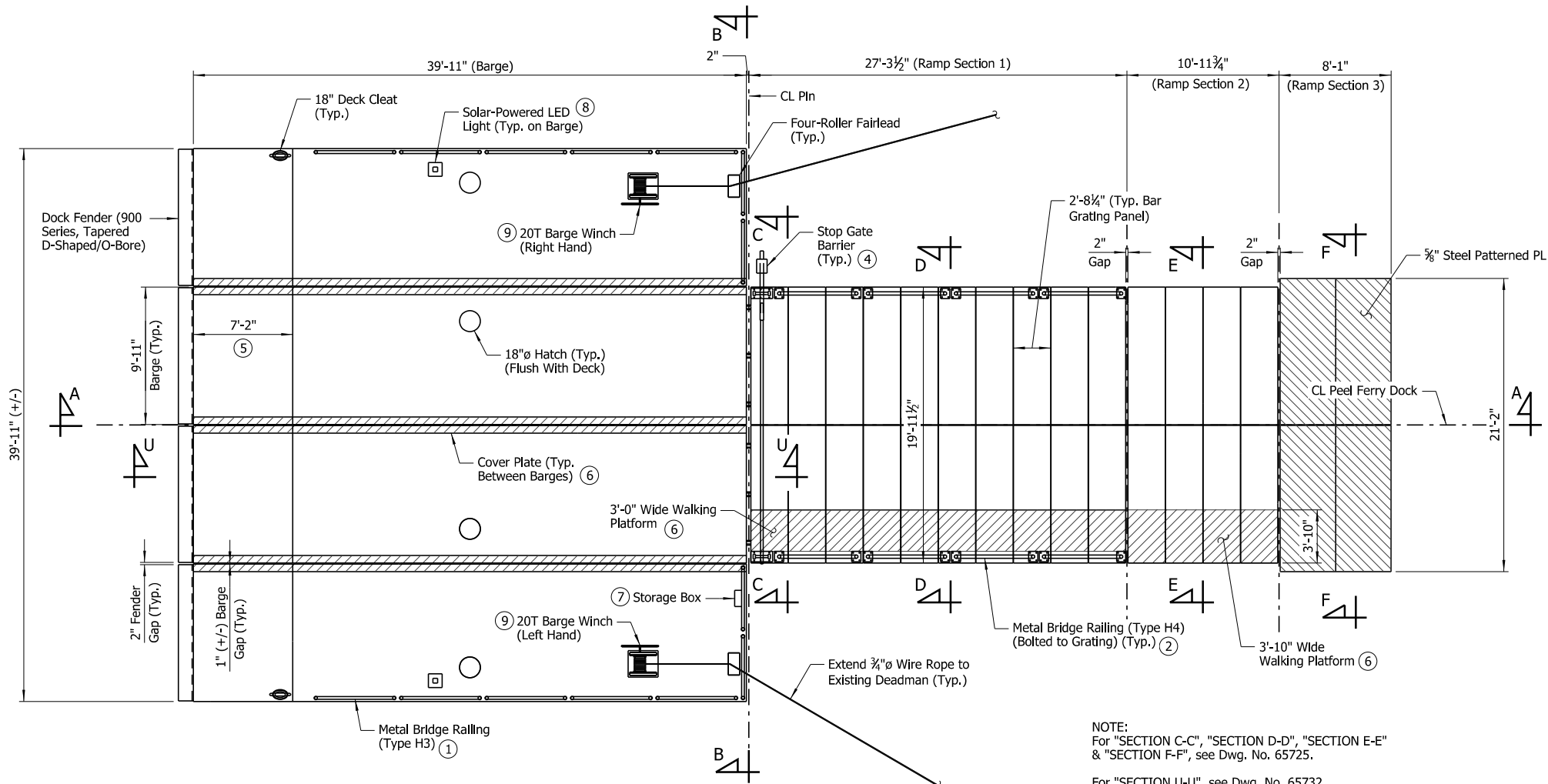


H-TRUCK LOADING DIAGRAM
No Scale



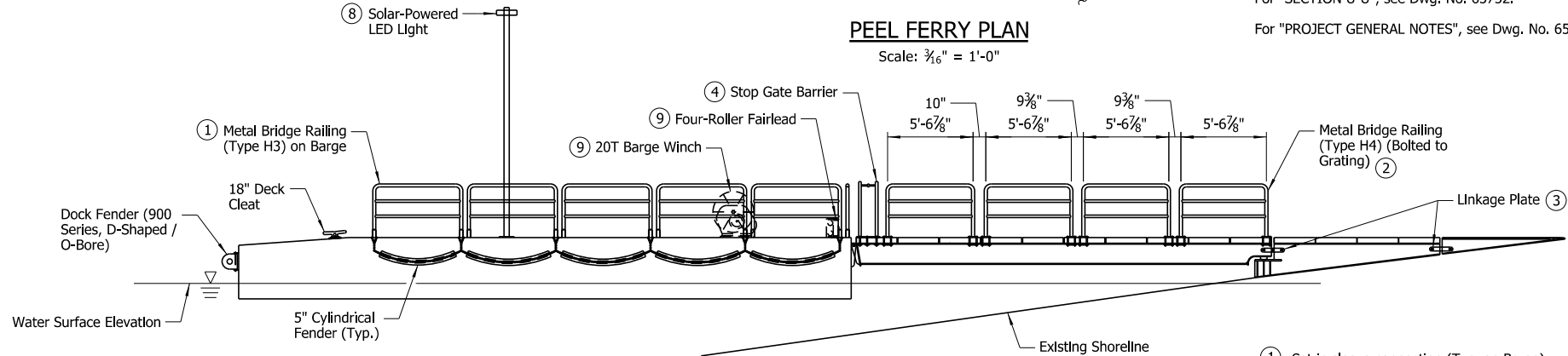
PROJECT GENERAL NOTES
PEEL FERRY DOCK IMPROVEMENTS (S)
MARION COUNTY
ROUTE 125 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b090654_GN
CHECKED BY: JME DATE: AUG. 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: AUG. 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65723

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	7	15
				07596 & 07597 DOCK DETAILS		65724		



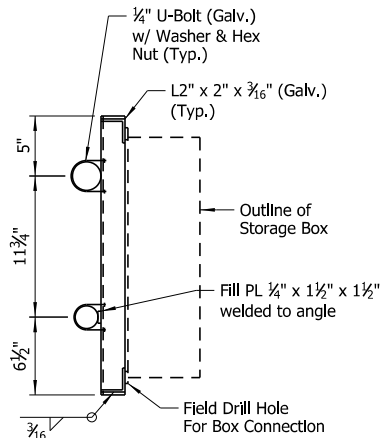
PEEL FERRY PLAN

Scale: 3/16" = 1'-0"



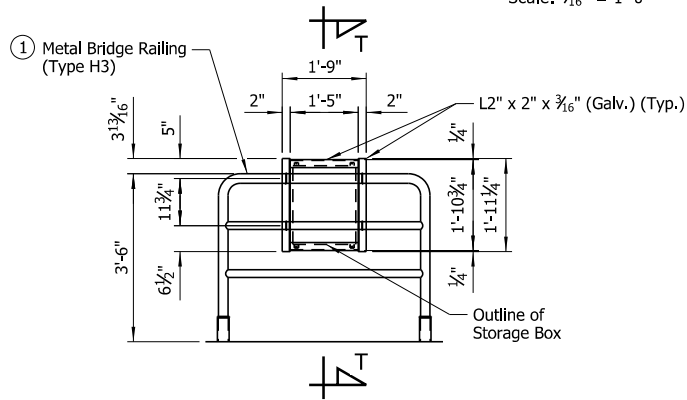
SECTION A-A

Scale: 3/16" = 1'-0"



SECTION T-T

Scale: 1 1/2" = 1'-0"

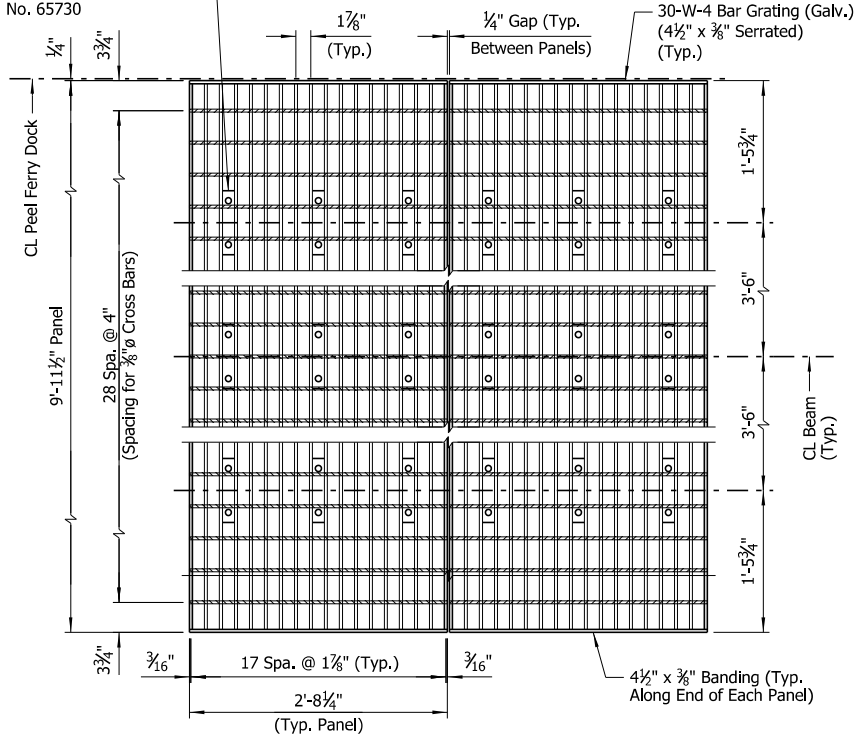


STORAGE BOX ELEVATION

Scale: 1/2" = 1'-0"

NOTE:
For "SECTION C-C", "SECTION D-D", "SECTION E-E"
& "SECTION F-F", see Dwg. No. 65725.
For "SECTION U-U", see Dwg. No. 65732.
For "PROJECT GENERAL NOTES", see Dwg. No. 65723.

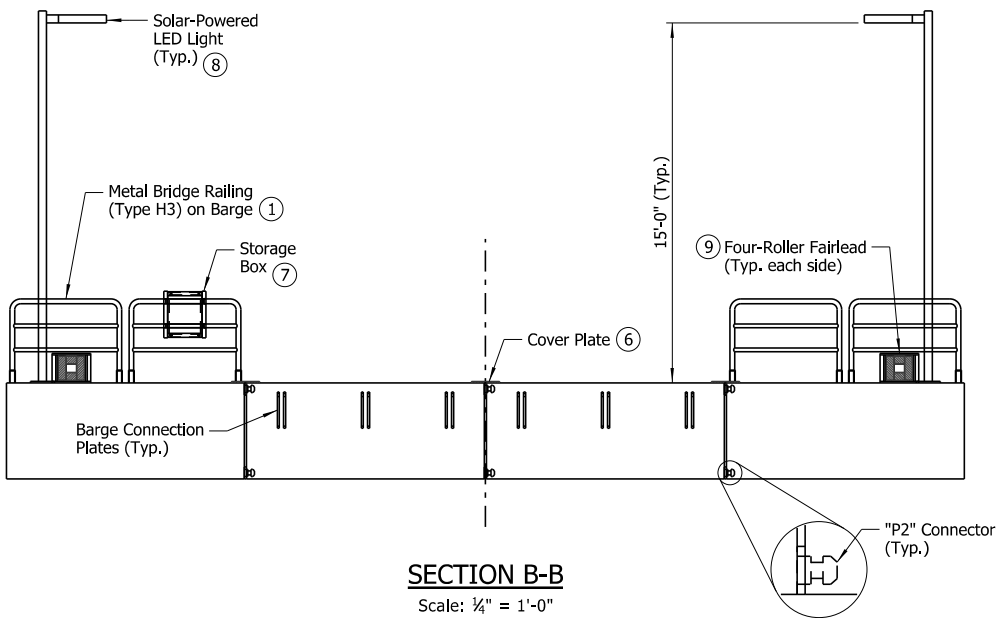
PL 1/2" x 1 1/2" x 8" Welded Lug (See
"GRATING CONNECTION DETAIL"
on Dwg. No. 65730)



TYPICAL BAR GRATING PLAN

(Ramp Sections 1 & 2)

Scale: 1/4" = 1'-0"



SECTION B-B

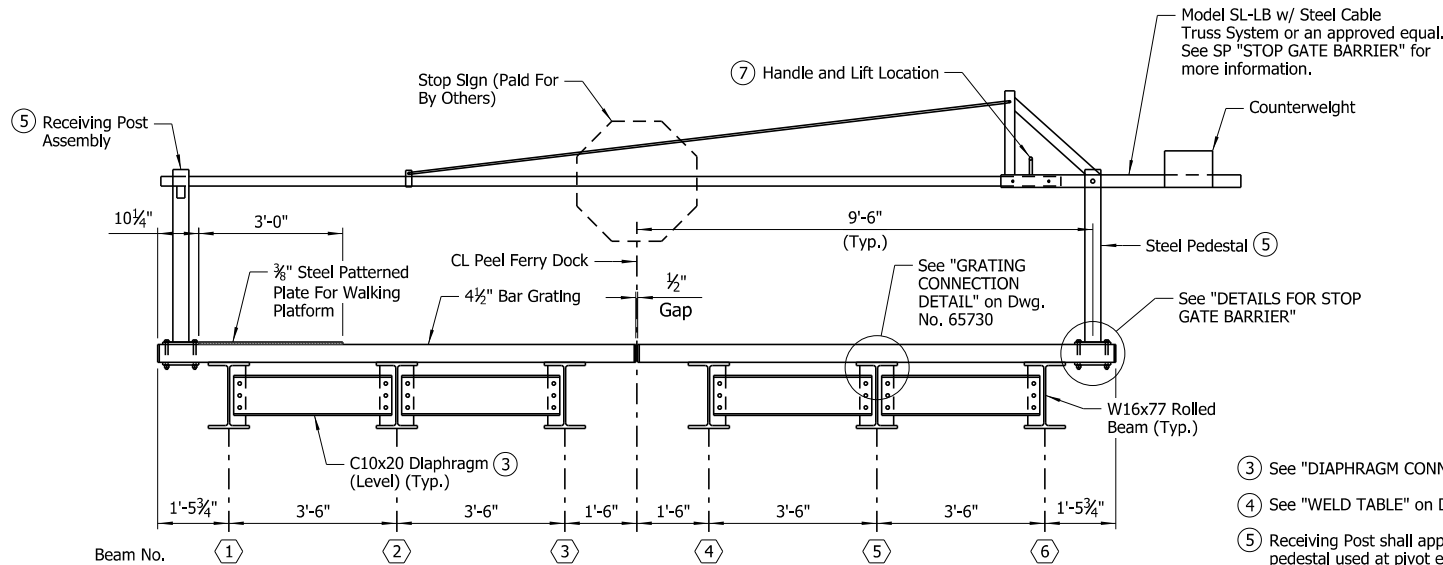
Scale: 1/4" = 1'-0"



SHEET 1 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

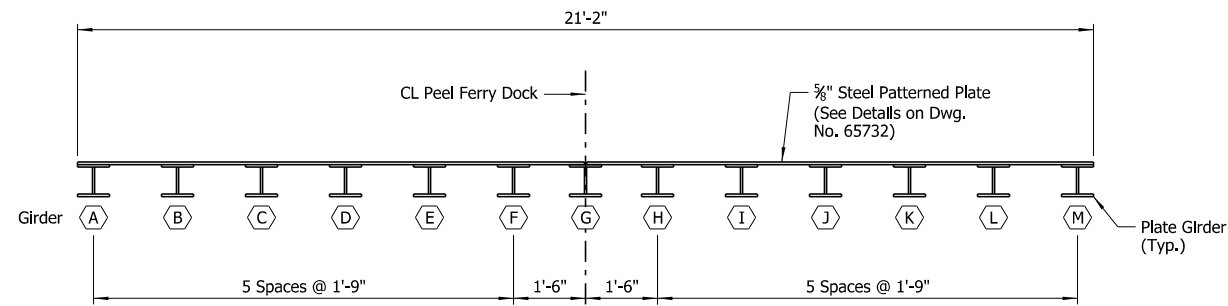
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CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65724

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	8	15
				07596 & 07597		DOCK DETAILS		65725



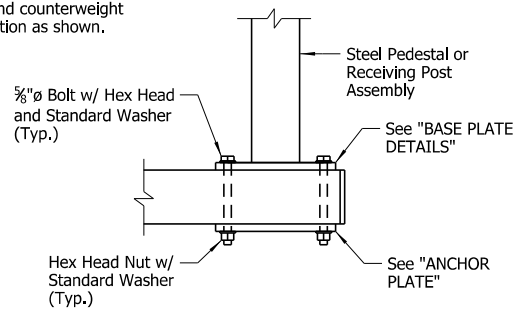
SECTION C-C
Scale: 1/2" = 1'-0"

- ③ See "DIAPHRAGM CONNECTION DETAILS"
④ See "WELD TABLE" on Dwg. No. 65730.
⑤ Receiving Post shall approximately match steel pedestal used at pivot end of Stop Gate Barrier.
⑥ See "METAL BRIDGE RAILING (TYPE H3)" on Dwg. No. 65731.
⑦ Coordinate handle location and counterweight size to accommodate lift location as shown.

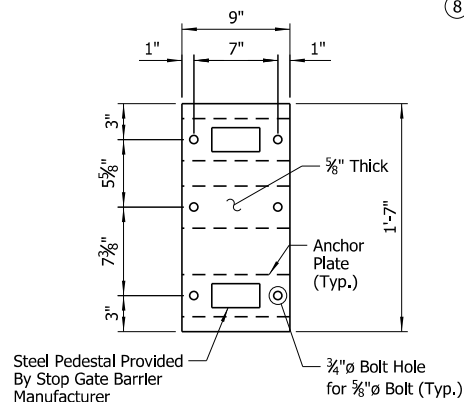


SECTION F-F
Scale: 1/2" = 1'-0"

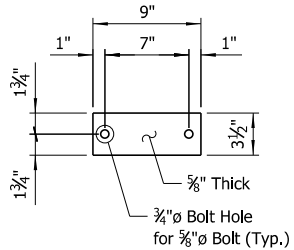
- ⑧ Detail shown is a modification from the standard base plate for Model SL-LB and is required to accommodate attachment to the steel grating.



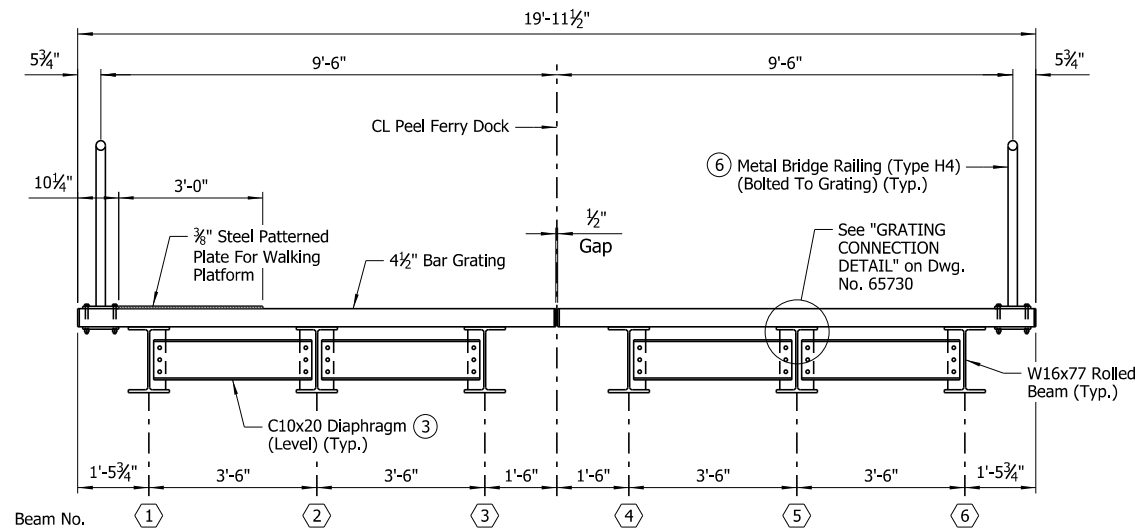
BARRIER GATE CONNECTION
Scale: 1 1/2" = 1'-0"



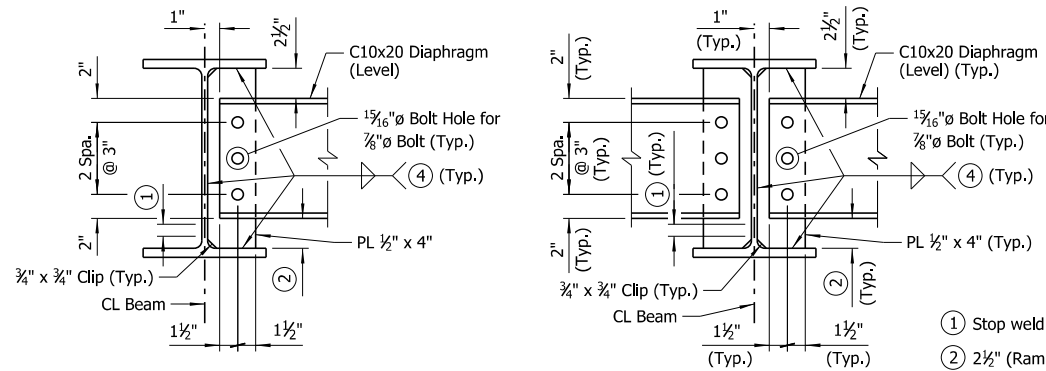
BASE PLATE DETAILS ⑧
Scale: 1 1/2" = 1'-0"



ANCHOR PLATE
(3 Required)
Scale: 3" = 1'-0"

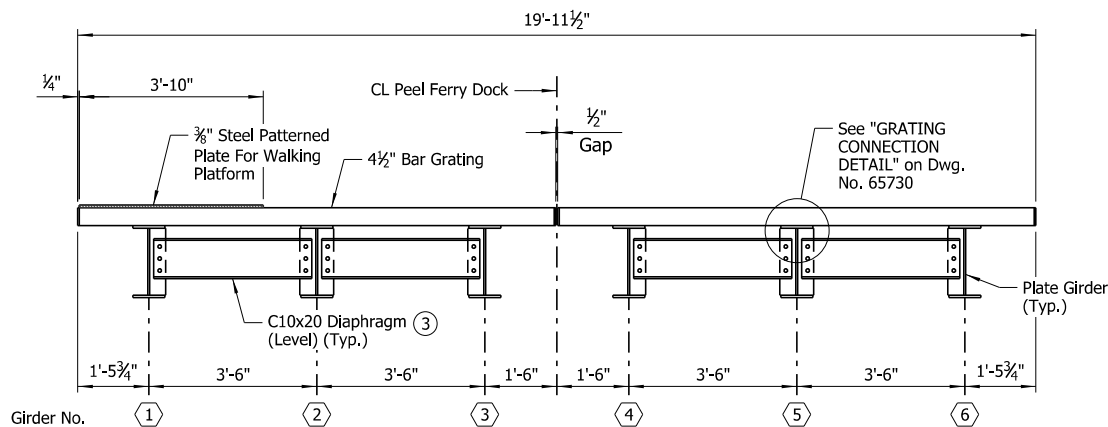


SECTION D-D
Scale: 1/2" = 1'-0"

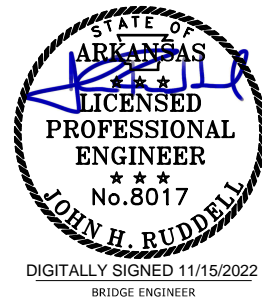


DIAPHRAGM CONNECTION DETAILS
Scale: 1 1/2" = 1'-0"

- ① Stop weld 1/4" To 1" from end of clip.
② 2 1/2" (Ramp Section 1)
Varies (Ramp Section 2)



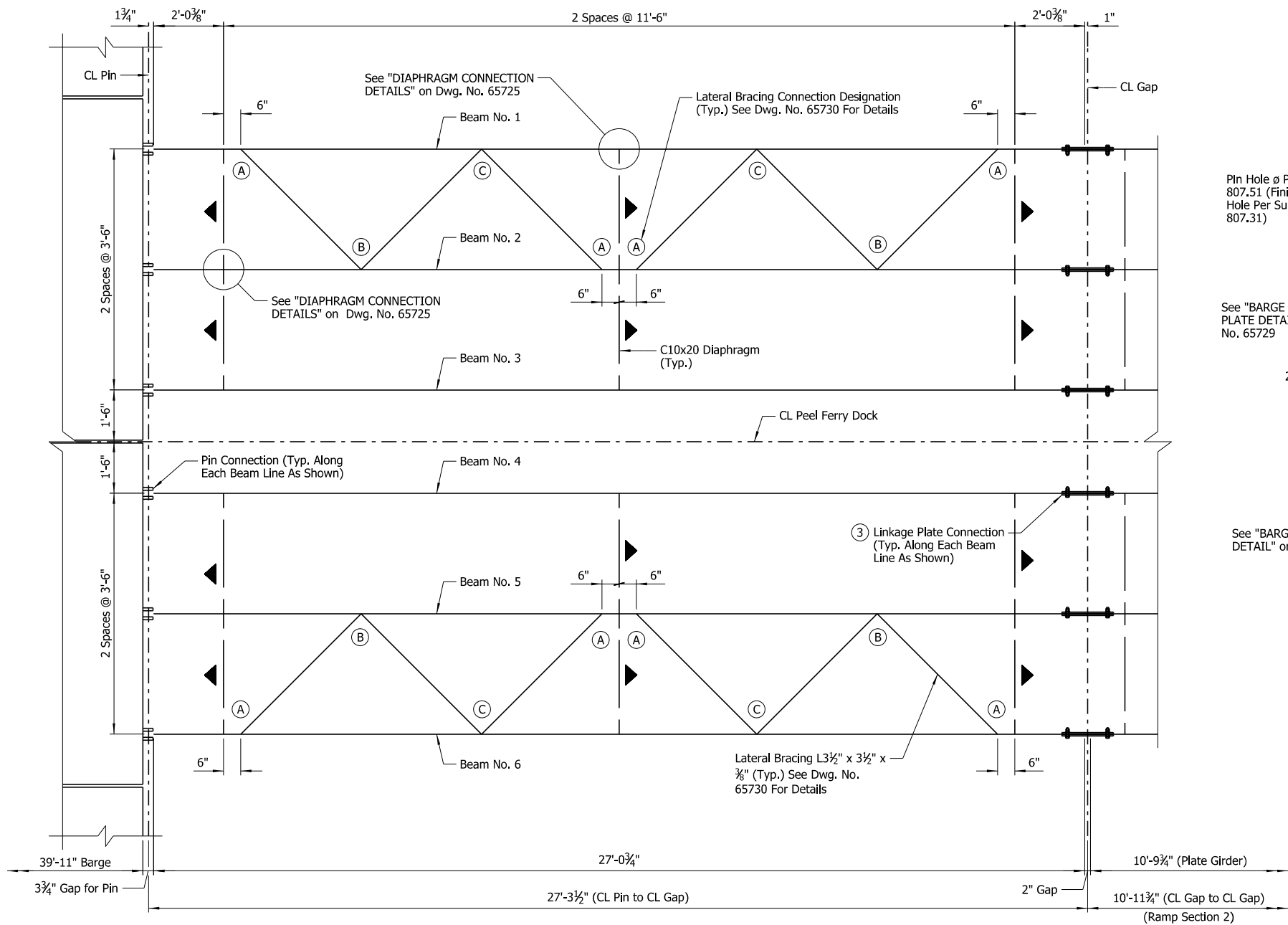
SECTION E-E
Scale: 1/2" = 1'-0"



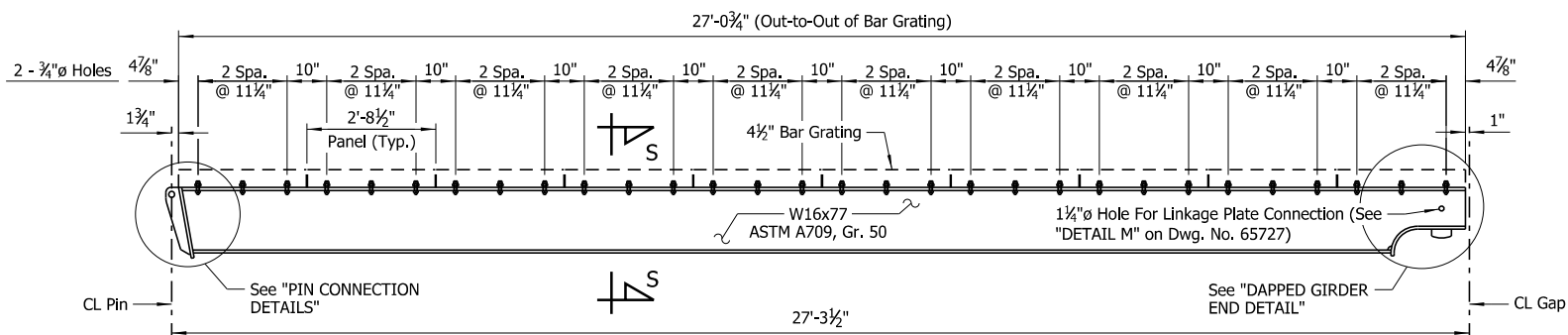
SHEET 2 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JULY 2022 FILENAME: b090654_s2
CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65725

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	9	15
				07596 & 07597	DOCK DETAILS		65726	



① **FRAMING PLAN - RAMP SECTION 1**
Scale: $\frac{3}{8}$ " = 1'-0"

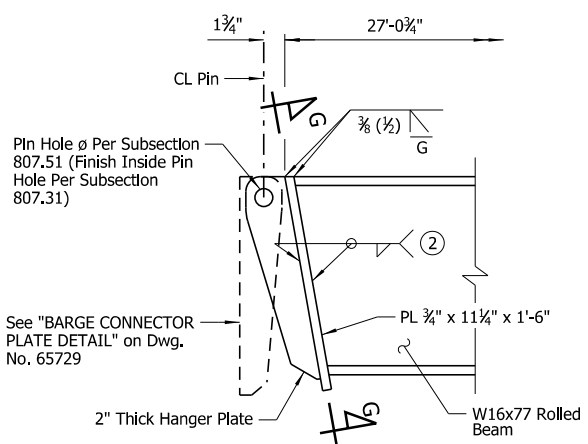


BEAM ELEVATION - RAMP SECTION 1
Scale: $\frac{1}{2}$ " = 1'-0"

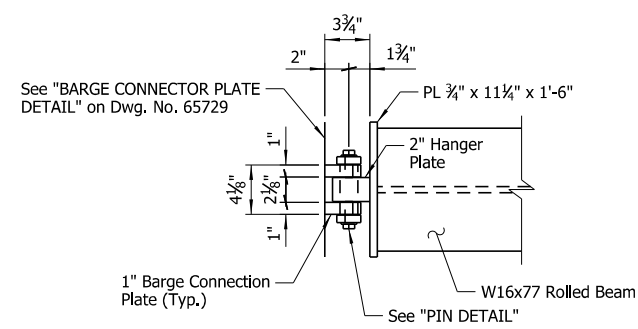
NOTES:
For "PROJECT GENERAL NOTES", see Dwg. No. 65723.

All structural steel (except pins used to connect ramp section to barge assembly) shall be ASTM A709, Gr. 50 and shall be paid for at the unit price per pound bid for "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". All structural steel shall be galvanized in accordance with AASHTO M111 after fabrication.

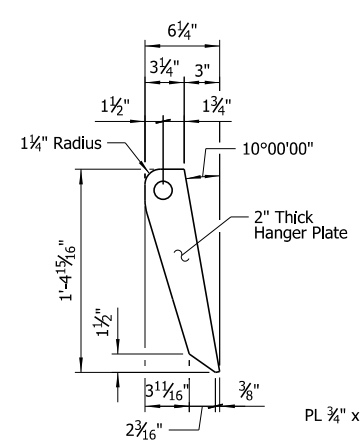
Pins used to connect Ramp Section 1 to barge assembly shall be ASTM A668, Gr. F and shall be paid for at the unit price per pound bid for "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".



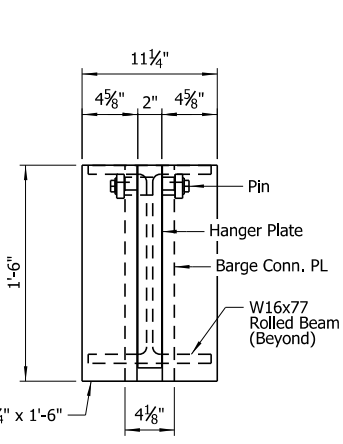
PIN CONNECTION ELEVATION
Scale: $1\frac{1}{2}$ " = 1'-0"



PIN CONNECTION PLAN
Scale: $1\frac{1}{2}$ " = 1'-0"



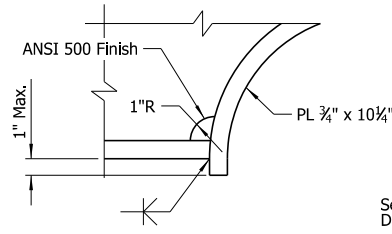
HANGER PLATE DIMENSIONS
Scale: $1\frac{1}{2}$ " = 1'-0"



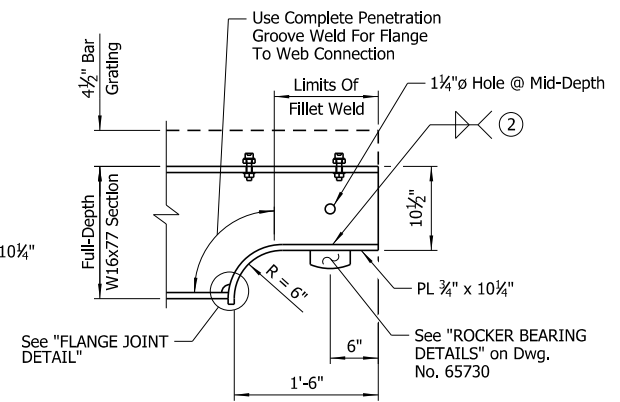
SECTION G-G
Scale: $1\frac{1}{2}$ " = 1'-0"

- ① See "FRAMING PLAN - RAMP SECTIONS 2 & 3" on Dwg. No. 65727 for additional details.
- ② See "WELD TABLE" on Dwg. No. 65730.
- ③ See "DETAIL M" on Dwg. No. 65727.

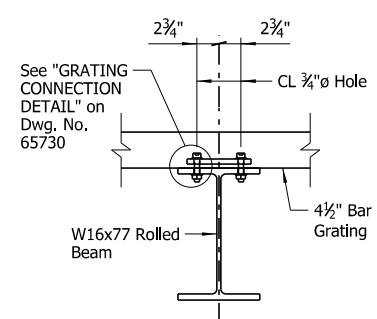
PIN CONNECTION DETAILS



FLANGE JOINT DETAIL
Scale: 3" = 1'-0"



DAPPED GIRDER END DETAIL
Scale: 1" = 1'-0"



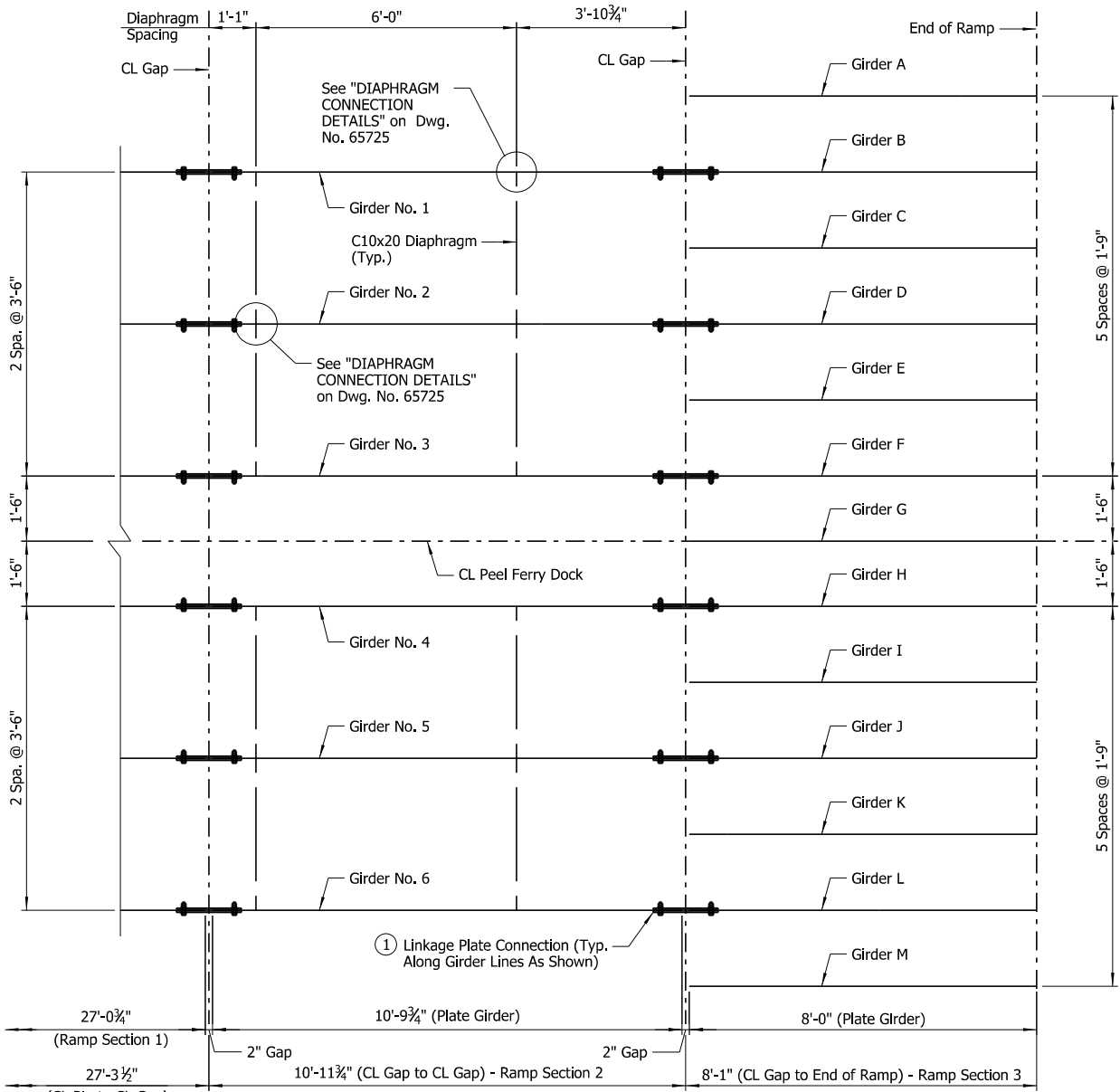
SECTION S-S
Scale: 1" = 1'-0"



SHEET 3 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

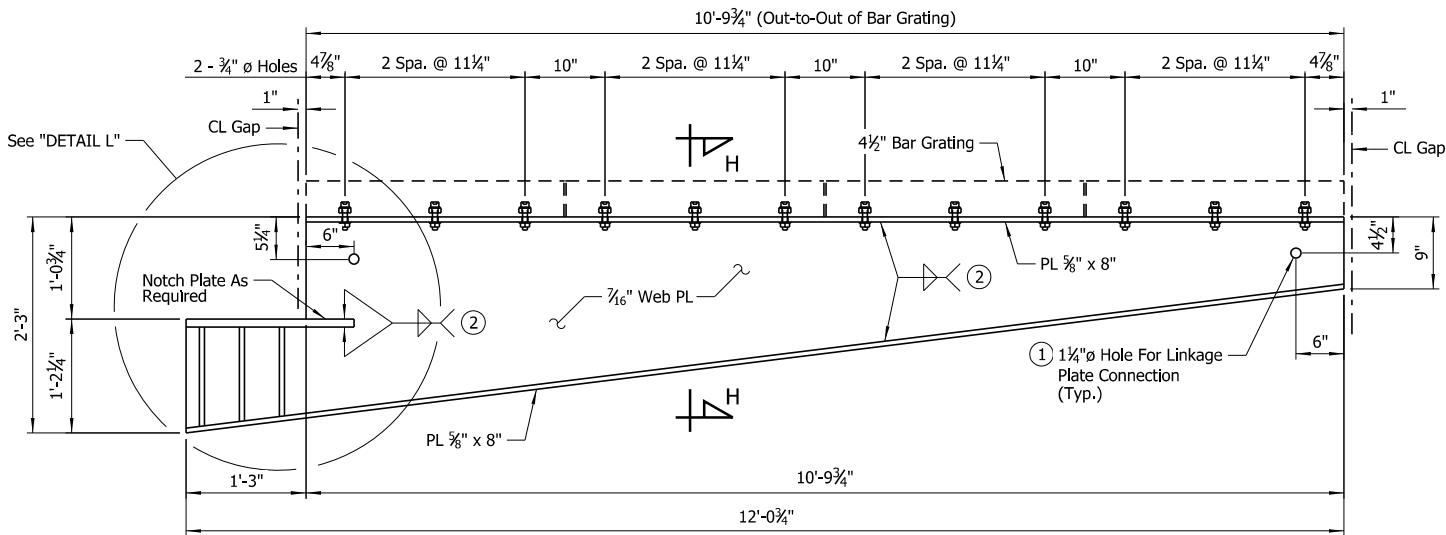
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CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65726

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	10	15
				07596 & 07597	DOCK DETAILS		65727	



FRAMING PLAN - RAMP SECTIONS 2 & 3

Scale: 1/2" = 1'-0"



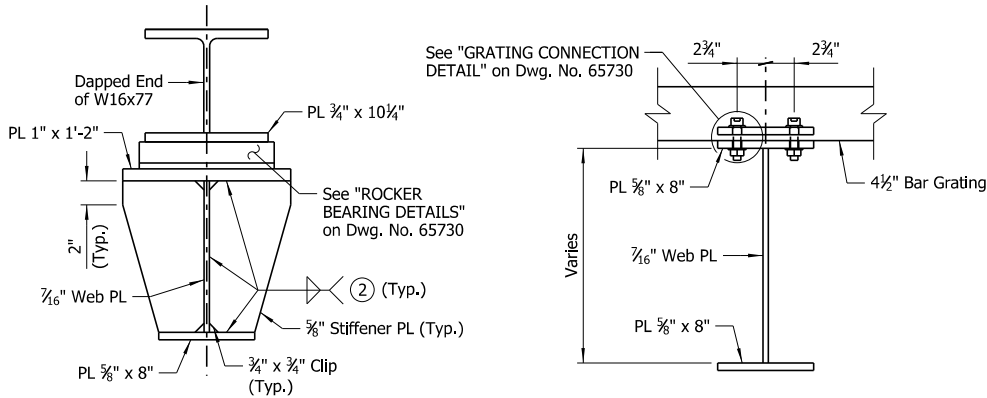
GIRDER ELEVATION - RAMP SECTION 2

Scale: 1" = 1'-0"

NOTES:
For "GIRDER ELEVATION - RAMP SECTION 3" and additional details of Ramp Section 3, see Dwg. No. 65728.

For "PROJECT GENERAL NOTES", see Dwg. No. 65723.

All structural steel shall be ASTM A709, Gr. 50 and shall be paid for at the unit price per pound bid for "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". All structural steel shall be galvanized in accordance with AASHTO M111 after fabrication.

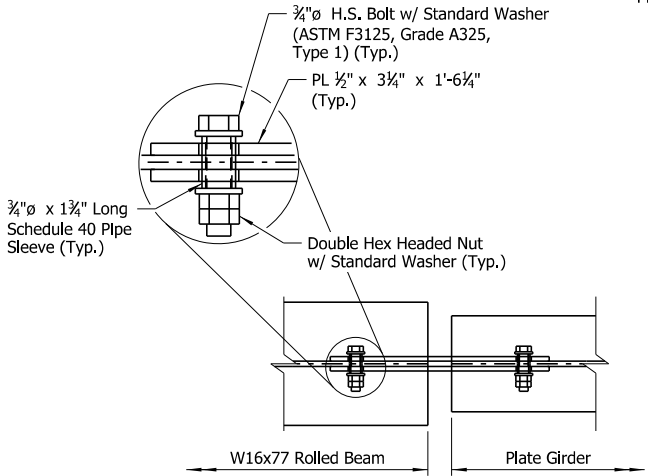


VIEW K-K

Scale: 1 1/2" = 1'-0"

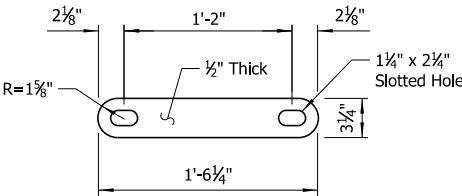
SECTION H-H

Scale: 1 1/2" = 1'-0"



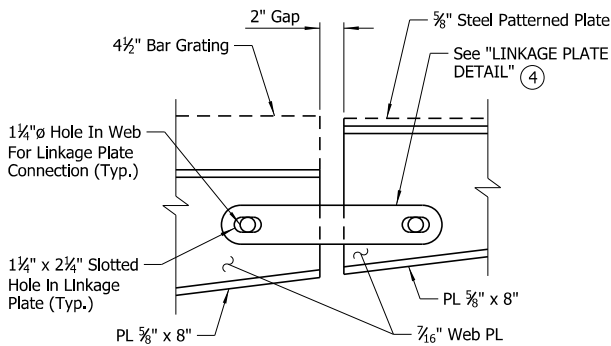
LINKAGE PLATE PLAN

Scale: 1 1/2" = 1'-0"



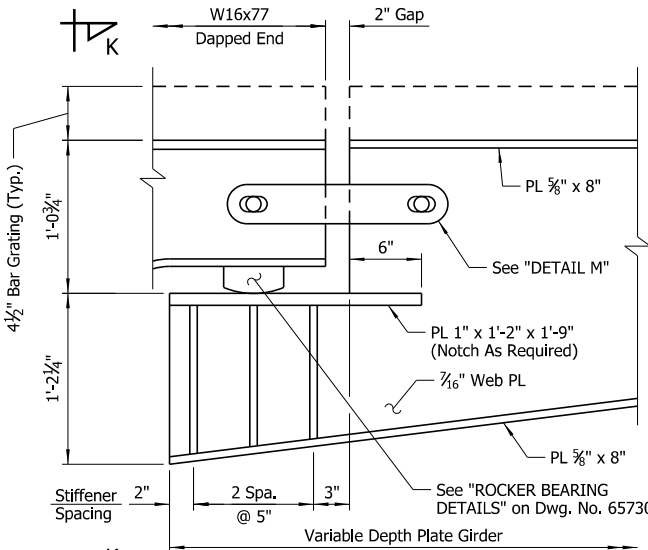
LINKAGE PLATE DETAIL

Scale: 1 1/2" = 1'-0"



DETAIL M

Scale: 1 1/2" = 1'-0"



DETAIL L

Scale: 1 1/2" = 1'-0"

- See "DETAIL M" and "LINKAGE PLATE PLAN" for additional details.
- See "WELD TABLE" on Dwg. No. 65730.
- See "FRAMING PLAN - RAMP SECTION 1" on Dwg. No. 65726 for additional details.
- See "FRAMING PLAN - RAMP SECTION 1" and "FRAMING PLAN - RAMP SECTIONS 2 & 3" on Dwg. No. 65726 and this drawing, respectively, for locations. See also "LINKAGE PLATE PLAN" on this drawing for additional information.
- Linkage Plate configuration shown for "DETAIL L". Configuration at "DETAIL M" is similar.

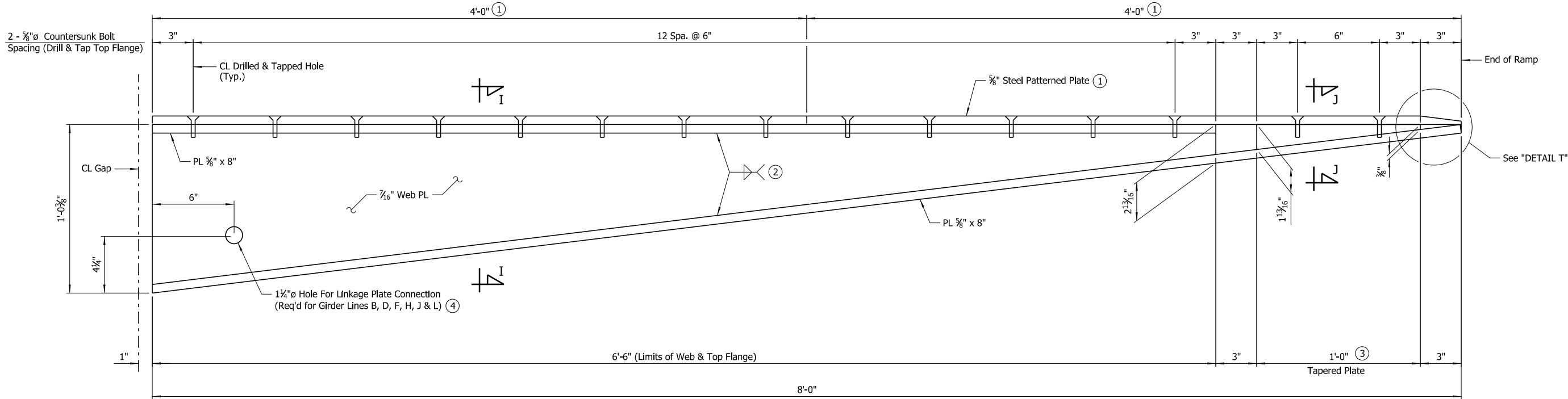


SHEET 4 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JULY 2022 FILENAME: b090654_s4
CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65727

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	11	15
				07596 & 07597	DOCK DETAILS		65728	

NOTE:
For "FRAMING PLAN - RAMP SECTIONS 2 & 3"
and additional details of Ramp Section 2,
see Dwg. No. 65727.



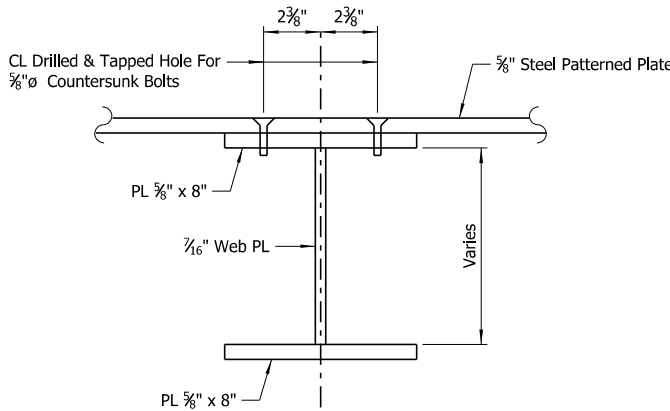
GIRDER ELEVATION - RAMP SECTION 3

Scale: 3" = 1'-0"

NOTES:
For "PROJECT GENERAL NOTES", see Dwg. No. 65723.

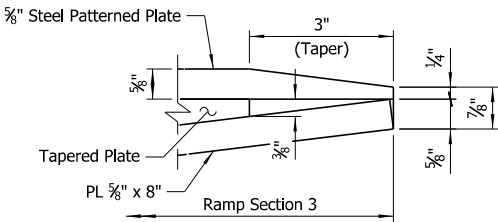
All structural steel shall be ASTM A709, Gr. 50 and shall be paid for at the unit price per pound bld for "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)". All structural steel shall be galvanized in accordance with AASHTO M111 after fabrication.

Countersunk bolts shall be ASTM F3125, Grade 325, Type 1 and shall be provided with hexagonal slotted heads.



SECTION I-I

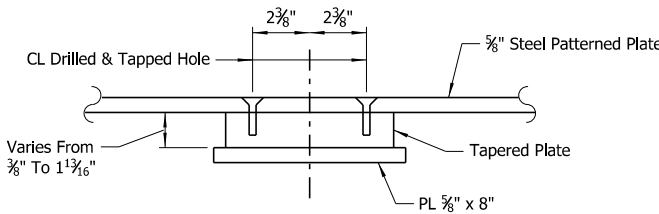
Scale: 3" = 1'-0"



DETAIL T

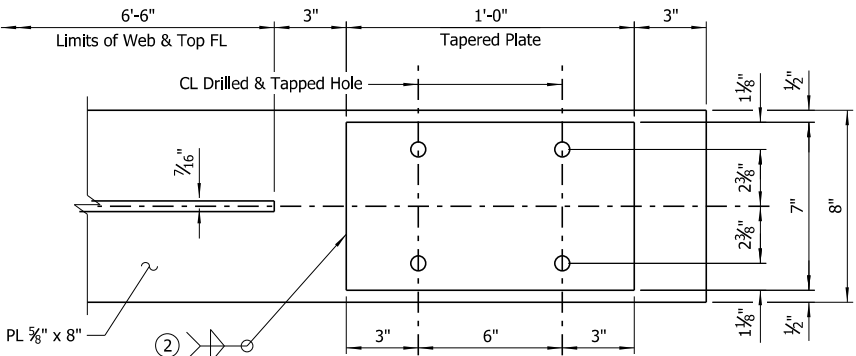
Scale: 6" = 1'-0"

- ① Provide 5/8" Steel Patterned Plate in 4'-0" widths. See "PATTERNED PLATE - RAMP SECTION 3" on Dwg. No 65732.
- ② See "WELD TABLE" on Dwg. No. 65730.
- ③ See "TAPERED PLATE DETAIL" for additional details.
- ④ See "DETAIL M" and "LINKAGE PLATE PLAN" on Dwg. No. 65727 for additional details.



SECTION J-J

Scale: 3" = 1'-0"



TAPERED PLATE DETAIL

Scale: 3" = 1'-0"

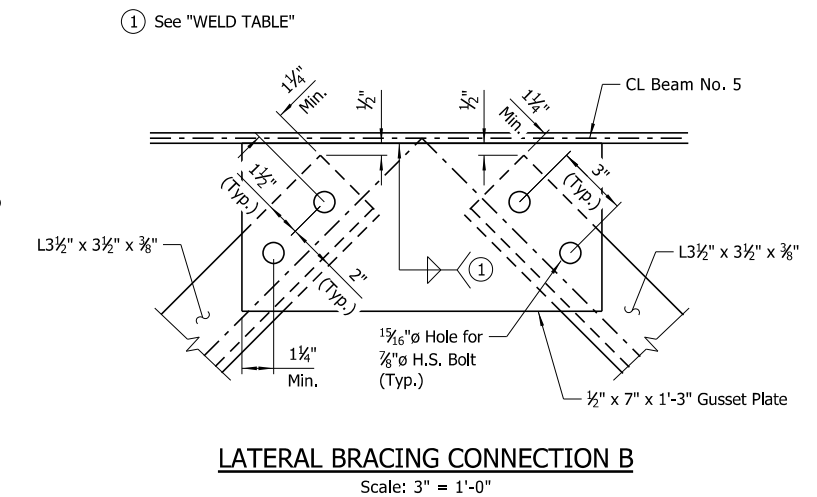
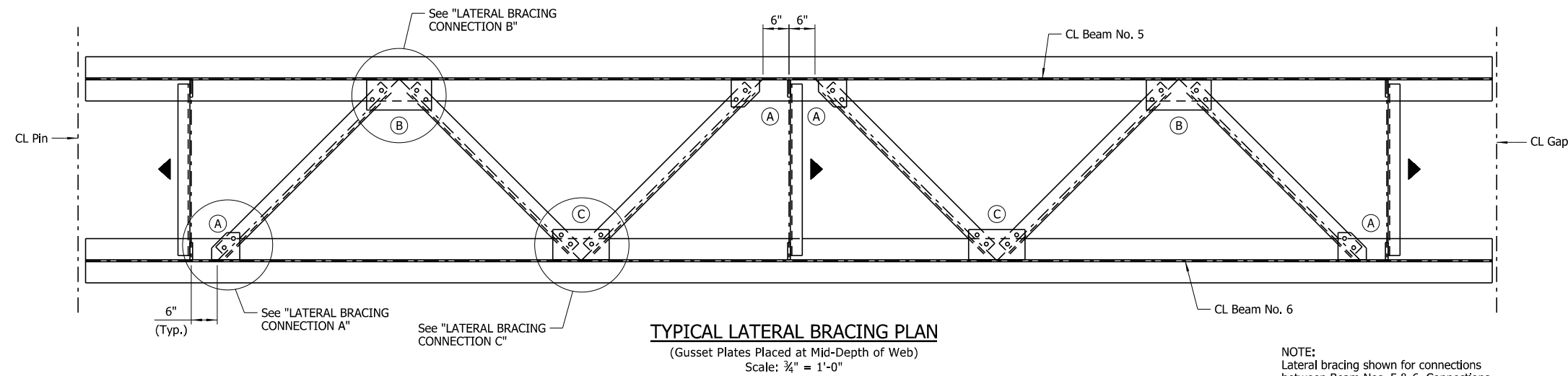
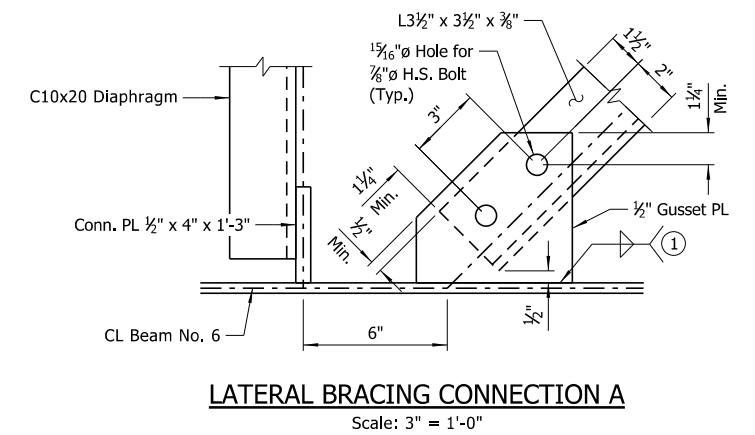
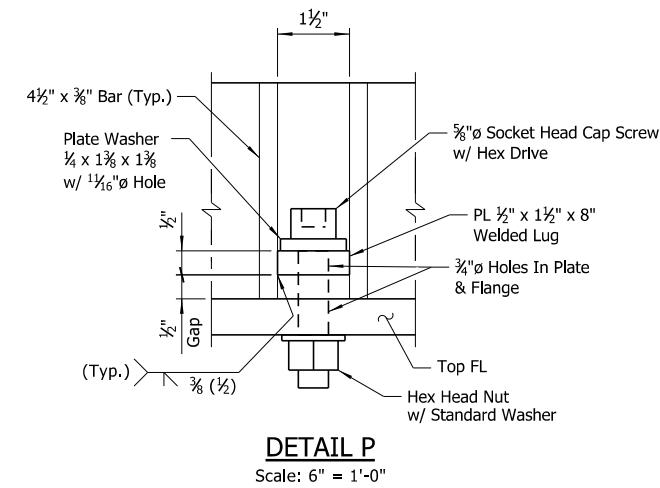
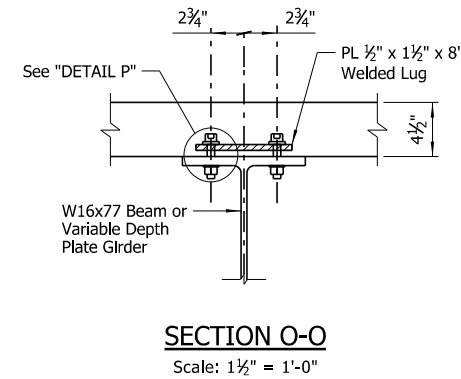
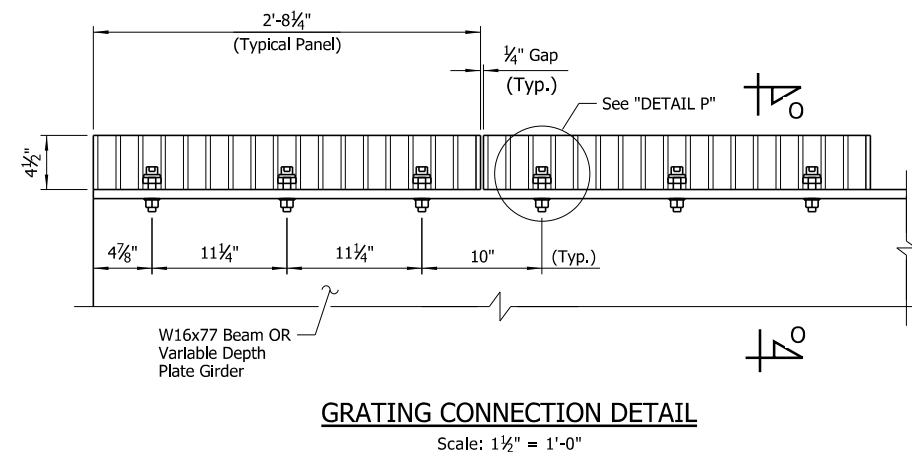


SHEET 5 OF 9
PEEL FERRY DOCK DETAILS

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JULY 2022 FILENAME: b090654_s5
CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65728

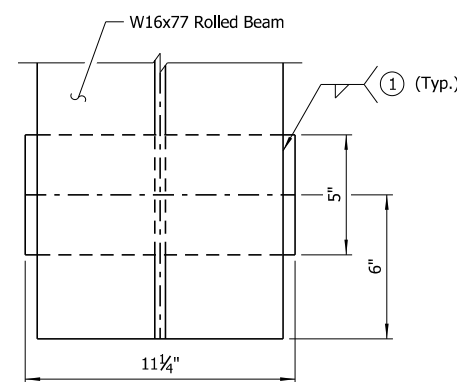
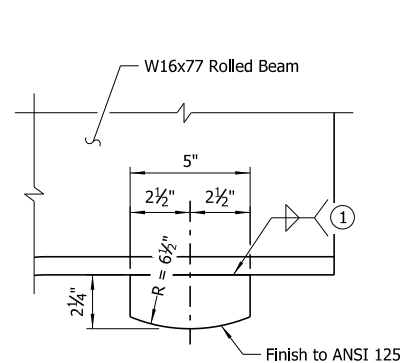
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	13	15
				07596 & 07597	DOCK DETAILS		65730	



NOTE:
Lateral bracing shown for connections
between Beam Nos. 5 & 6. Connections
between Beam Nos. 1 & 2 similar.

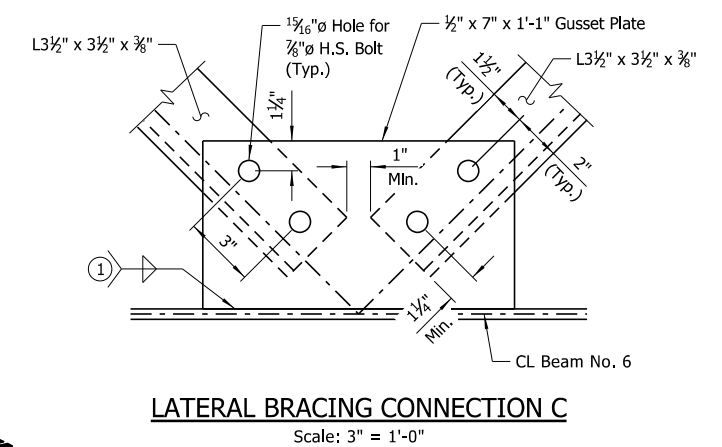
LEGEND

◀▶ = Orientation of C10x20 Diaphragm (Indicates Direction of Flange Projection)



Material Thickness Of Thicker Part Joined (Inches)	Minimum Size Of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To $\frac{3}{4}$ " Inclusive	$\frac{1}{4}$ "	
Over $\frac{3}{4}$ "	$\frac{5}{16}$ "	

NOTE:
When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

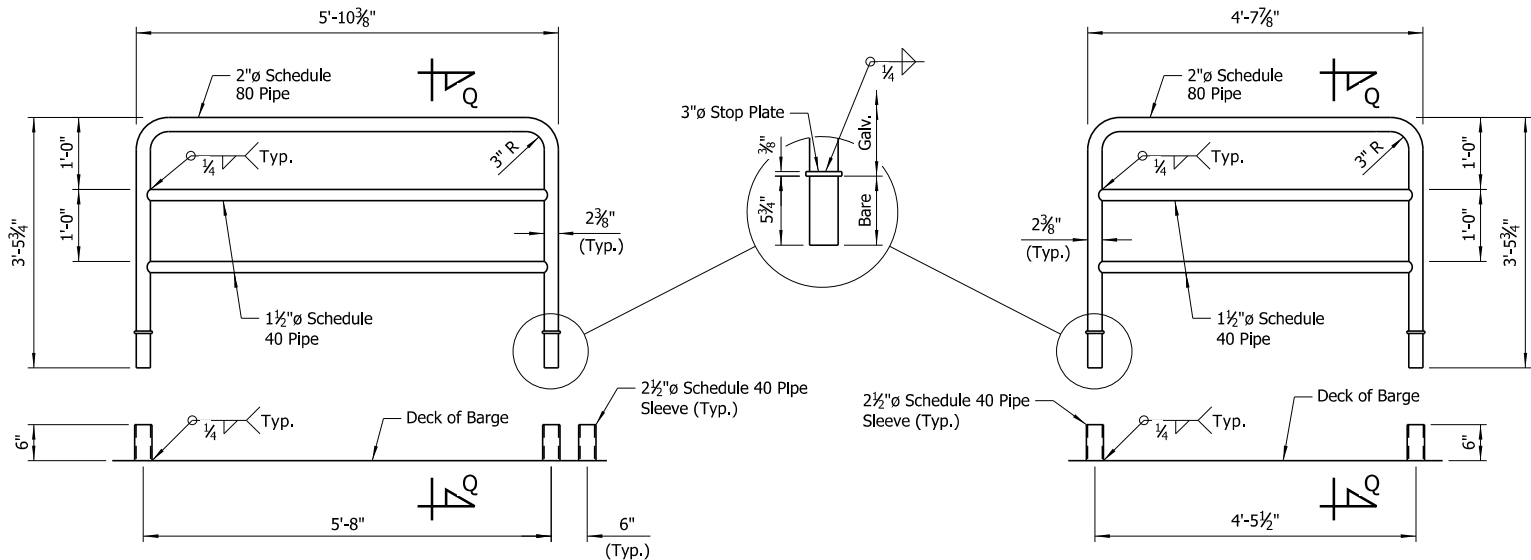


SHEET 7 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JULY 2022 FILENAME: b090654_s7
CHECKED BY: JME DATE: JULY 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: JULY 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65730



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	14	15
				07596 & 07597	DOCK DETAILS		65731	

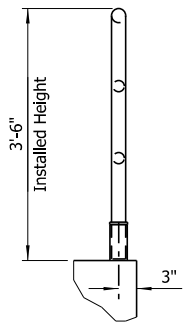


RAILING ALONG SIDES

RAILING ALONG FRONT

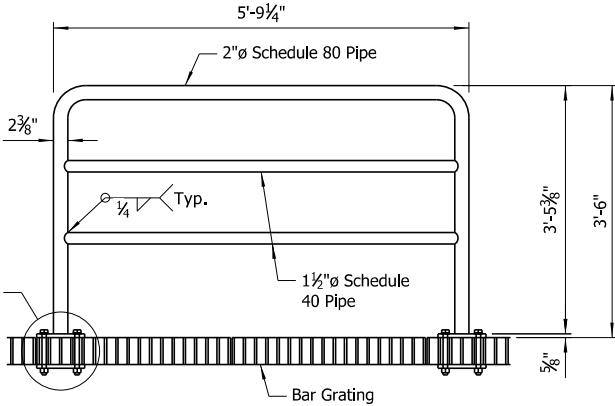
METAL BRIDGE RAILING (TYPE H3) DETAILS

Scale: 3/4" = 1'-0"



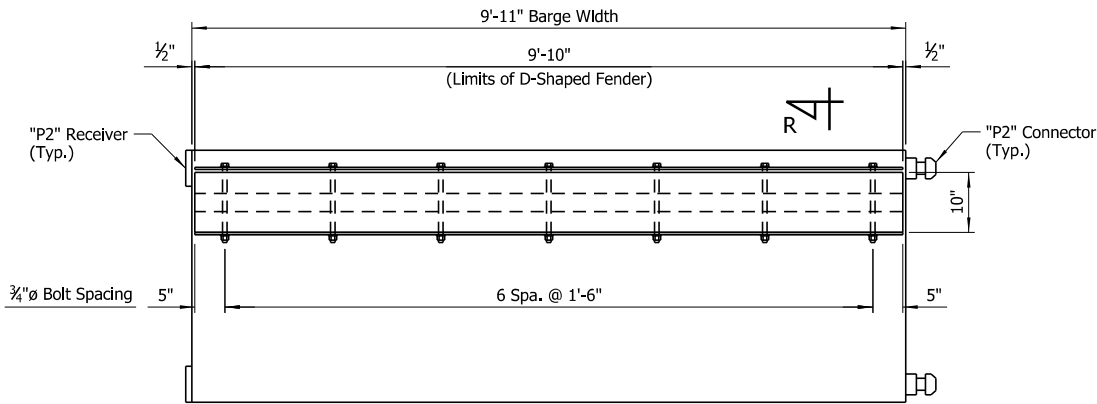
SECTION Q-Q

Scale: 3/4" = 1'-0"



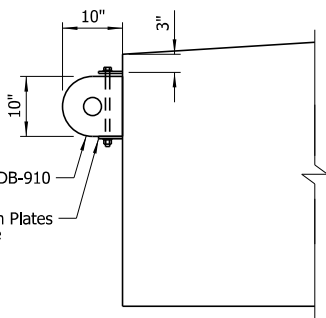
METAL BRIDGE RAILING (TYPE H4) DETAIL

Scale: 3/4" = 1'-0"



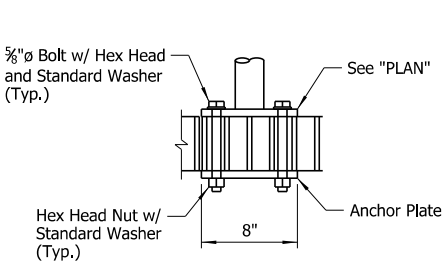
ELEVATION @ D-SHAPED FENDER

Scale: 3/4" = 1'-0"

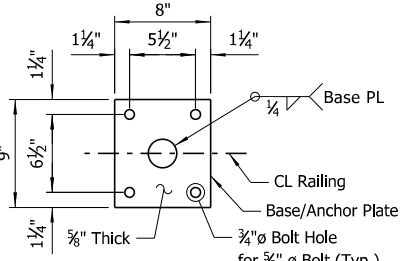


SECTION R-R

Scale: 3/4" = 1'-0"



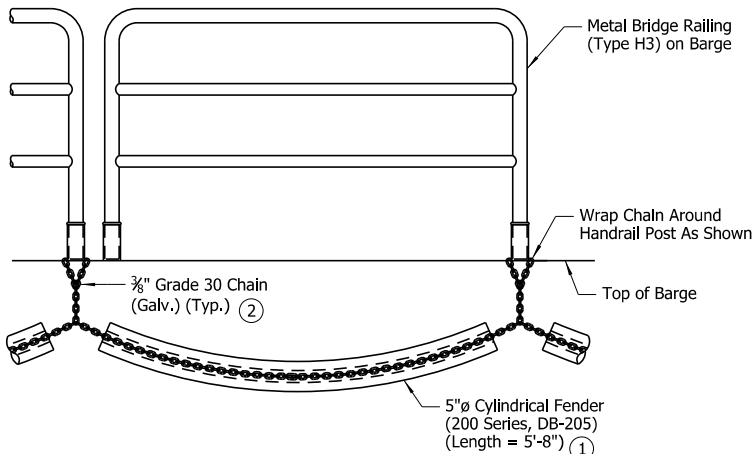
ELEVATION



PLAN

BOLTED HANDRAIL BASE/ANCHOR PLATE DETAILS

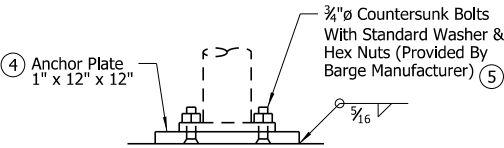
Scale: 1 1/2" = 1'-0"



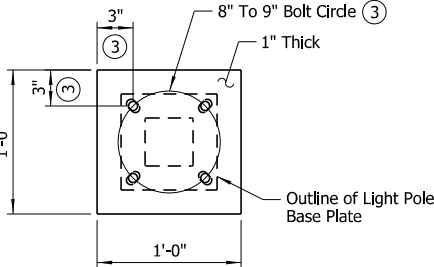
ELEVATION ALONG SIDE FENDERING

Scale: 3/4" = 1'-0"

- Fenders shown are products manufactured by Duramax Marine or an approved equal. See SP "FENDERING" for additional information.
- Provide Galvanized Quick Link Connector and Shackles to facilitate connection to post (2 Quick Links and 2 Shackles per post).
- Verify with light pole supplier
- Anchor Plate to be provided with Barge
- Provide means of protecting anchor bolts during shipment.
- See SP "BARGE WINCH SYSTEM" for additional information.



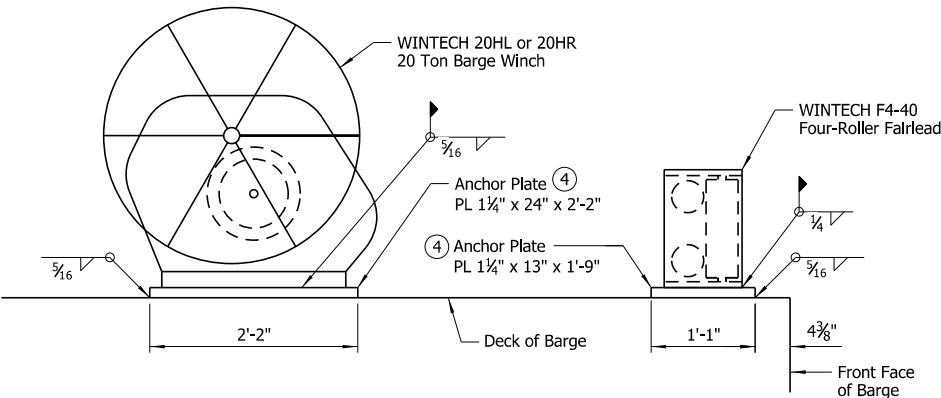
ELEVATION



PLAN

LIGHTPOLE BASE DETAILS

Scale: 1 1/2" = 1'-0"



WINCH/FAIRLEAD CONNECTION

Scale: 3/4" = 1'-0"

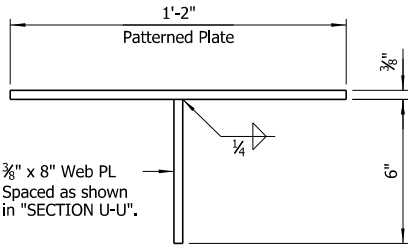
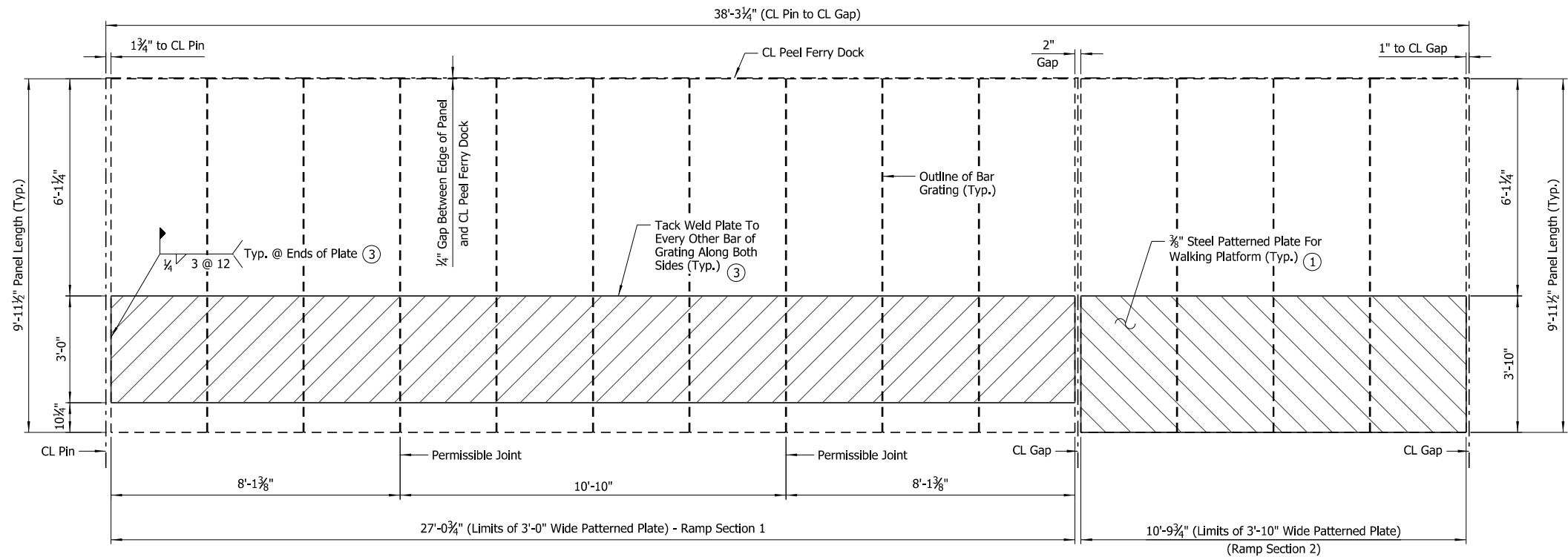


SHEET 8 OF 9
PEEL FERRY DOCK DETAILS

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b090654_s8
CHECKED BY: JME DATE: AUG. 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: AUG. 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65731

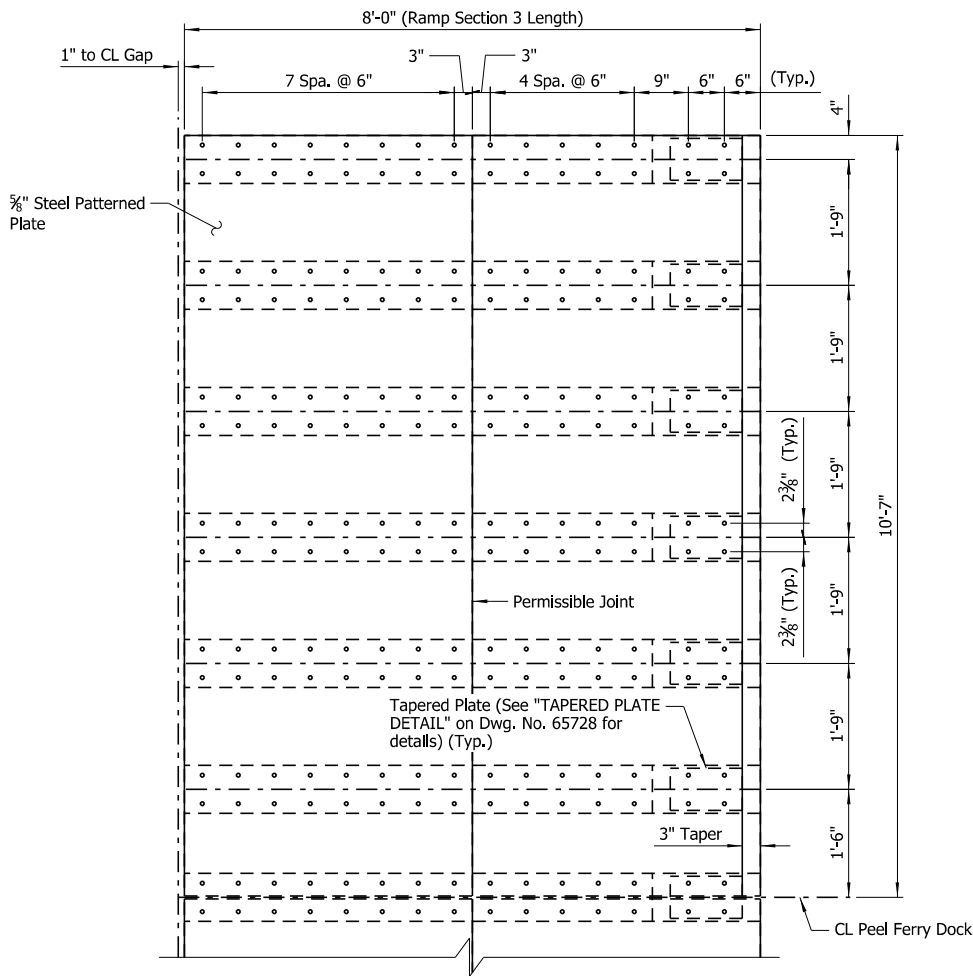
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090654	15	15
				07596 & 07597	DOCK DETAILS		65732	



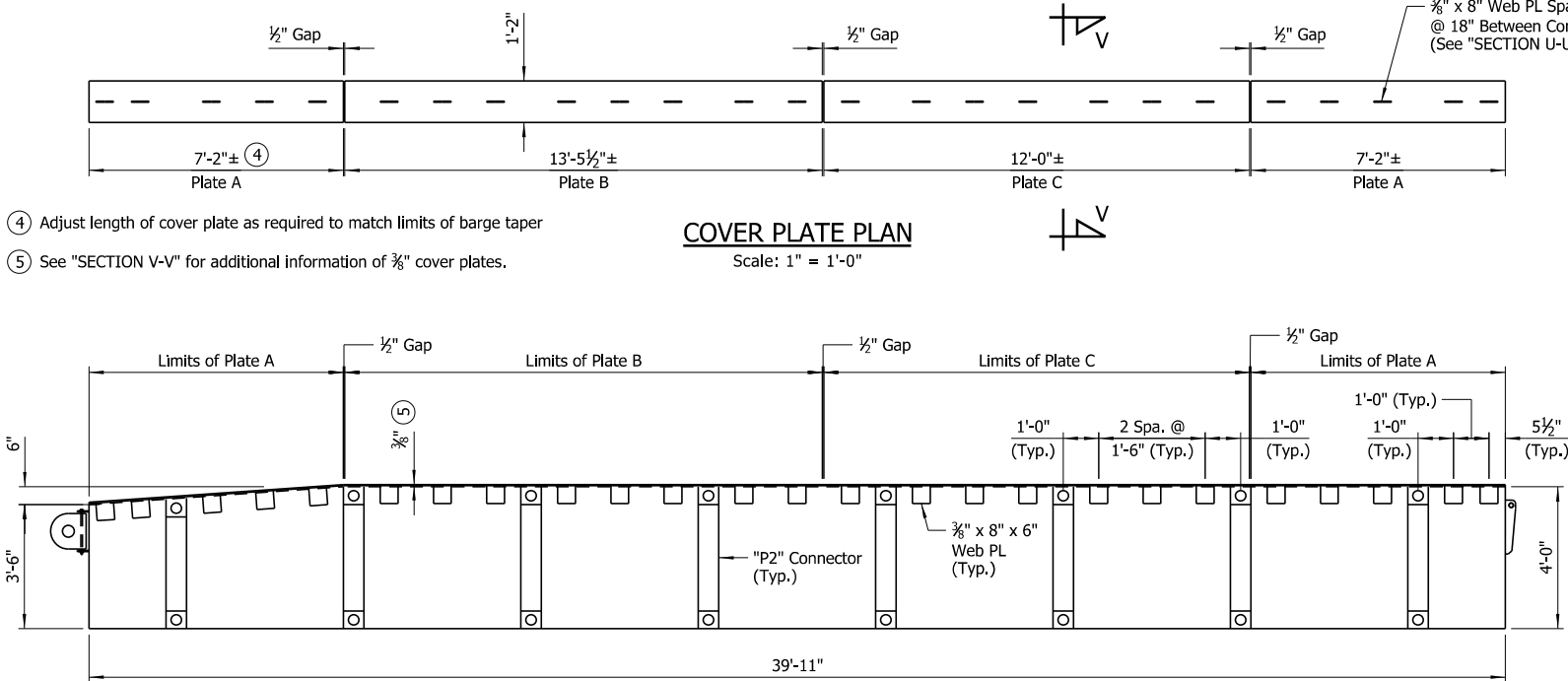
SECTION V-V
Scale: 3" = 1'-0"

- ① 3/8" Patterned Plate used for Walking Platform shall be paid for at the unit price per pound bid for "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".
- ② Cover Plates required at all joints between barges. Cost of the cover plate shall be included in the unit price per pound of "STRUCTURAL STEEL IN BEAM SPANS (A709, GR. 50)".
- ③ Repair galvanized coating at field weld locations using materials listed on ARDOT's QPL.

PATTERNED PLATE DETAIL - RAMP SECTIONS 1 & 2
Scale: 1/2" = 1'-0"



PATTERNED PLATE - RAMP SECTION 3
Scale: 3/4" = 1'-0"



COVER PLATE PLAN
Scale: 1" = 1'-0"

SECTION U-U
Scale: 3/8" = 1'-0"



SHEET 9 OF 9
PEEL FERRY DOCK DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b090654_s9
CHECKED BY: JME DATE: AUG. 2022 SCALE: As Shown
DESIGNED BY: JHR DATE: AUG. 2022
BRIDGE NO. 07596 & 07597 DRAWING NO. 65732